EX·LIBRIS·COLL·MED·PHILAD·INSTIT·A·D·MDCCLXXXVII.
NON SIBI SED TOTI

Class_____ No._____

Presented by

Exchange.

Bdg.2.20

LIBRARY OF THE
COLLEGE OF PHYSICIANS
OF PHILADELPHIA

Digitized by the Internet Archive
in 2016

https://archive.org/details/westvirginiamedi1419west

THE WEST VIRGINIA

MEDICAL JOURNAL

Published by The West Virginia State Medical Association

Vol. XIV. JULY, 1919 No. 1.

Contents

Presidential Address Before West Virginia State Medical Association, Clarksburg, May, 1919 1
Robert J. Reed, M. D., Wheeling.

Transactions of House of Delegates 15

Report of Meetings of the Council 22

Multiple Abscess—Sequel of Influenza—A Case Report 30
By Robert M. Lewis, Baltimore.

(*Continued on Page Six, Advertising Section*)

IN MANY A HURRY CALL

The doctor will find Thromboplastin solution (Armour) a most convenient thing to have in his case. It is a specific hemostatic and acts promptly.

THROMBOPLASTIN SOLUTION (Armour)
is made from the brains of kosher-killed cattle and is standardized physiologically on oxalated blood, is guaranteed to be of full therapeutic strength and is sold in dated packages—25 c. c. vials.

PITUITARY LIQUID (Armour)
is the physiologically standardized solution of Posterior Pituitary and is absolutely free from chemical preservatives. A small dose is suggested for obstetrical work—½ c. c. ampoules. Boxes of 6.
For surgical work 1 c. c. ampoules. Boxes of 6.

As manufacturers of the endocrine gland and other organotherapeutic agents our facilities are at the service of the medical profession.

Armour's Sterilized Catgut Ligatures are offered in standard (60-in.) and emergency lengths (20-in.) plain and chromic.

ARMOUR & COMPANY
CHICAGO

W. A. QUIMBY, M. D.

PRACTICE LIMITED TO

X-Ray Diagnosis and Treatment
Electrotherapy

Office Hours: All Day.

SCHMULBACH BUILDING, WHEELING, WEST VIRGINIA

LOWRY'S DRUG STORE
Huntington, - - - West Virginia

J. M. LOWRY, Proprietor

Prescription Specialists

Special distributing depot for
PARKE, DAVIS & COMPANY'S
VACCINES, SERUMS AND
BIOLOGICAL PRODUCTS

Personal Attention Given Telegrams and Prompt Service Guaranteed.

The Uncertainty of Life is Fully known by every physician. That being the case, Doctor, you need some

Penn Mutual Life Insurance

SEE

DAN H. HOLTON

The $1,000,000 Man

General Agent Huntington, W. Va.

IF BABIES WERE STANDARDIZED

A Standard Mixture of Food Materials would suffice for their artificial Feeding

BUT THE BABY HAS AN INDIVIDUAL DIGESTION

Requiring individual consideration from the infant feeder. The arrangement of the diet for the individual baby marks the difference between success and failure in infant feeding

Different Babies

of the same age require different quantities of the diet constituents. Sometimes sugar is temporarily withdrawn entirely from the diet. Sometimes one salt and sometimes another is added to the diet.

Different Salts in the Diet yield different Results

Sodium Chloride has a value where an infant suffers from diarrhoea. Potassium Carbonate acts generally as a corrective in the constipation of infants.

These salts are classed as constructive food material.

THIS IS WHY WE PREPARE

MEAD'S DEXTRI-MALTOSE in 3 forms (No. 1, No. 2 and No. 3)

No. 1. With Sodium Chloride, 2% — No. 2 Unsalted — No. 3 With Potassium Carbonate, 2%

The simple, easily understood principles of modern bottle feeding are found in our booklet "Simplified Infant Feeding." Write for it.

MEAD JOHNSON & CO., EVANSVILLE, IND.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER, } Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 11—NO. 1 HUNTINGTON, W. VA., JULY, 1919. Subscription $1.50 per Year
Single Copies 20 Cents

WEST VIRGINIA STATE MEDICAL ASSOCIATION.

PRESIDENT'S ADDRESS: OUR OBLIGATIONS WITH RESPECT TO THE PUBLIC HEALTH PROBLEMS OF THE RECONSTRUCTION PERIOD.*

Robert J. Reed, M.D., Wheeling.

In this momentous year of the world's history, in which righteousness and justice have had a new birth out of the travail of the holiest war of record, no assembly or convention is quite in harmony with the spirit of the times, which does not have running through its transactions the joyous though solemn note of Victory.

Last year our souls were atuned to the battle cry of Liberty and when this Association convened in October, America's youth three hundred thousand a month were rallying to this call with the spirit of crusaders, not to redeem the material cross as was the dream of soldiers of a distant age, but to establish once and forevermore its basic principles of truth and right and good will and peace on earth; and in numbers abundant physicians moved with them, with the same soldierly spirit of sacrifice and with a passion for service on a mission of mercy, to save, to alleviate and comfort our heroic sons, victoriously battling, stoically suffering and gloriously dying that home and country might have abiding security and genuine peace.

In this greatest of all of earth's tragedies, the world-war, physicians have played a great part, "great in the arduous greatness of things done". From no vocation or profession did so large a percentage of its active membership enter the military service as volunteered from the Medical Profession. There were less than one thousand physicians in the service of the United States Army and Navy at the time of our entrance into the war, and by the day hostilities had ceased, practically forty thousand

*Presidential address before the West Virginia State Medical Association at the Fifty-second Annual Session, Clarksburg, May, 1919.

JUL 25 1950

had been added to these corps. About twenty-five thousand physicians rendered service on the various boards connected with the selective service system and performed the onerous and exacting duty of the physical examination of four to five millions of men, in order to determine their availability for general military service.

Among physicians not eligible to active service because of age or physical disability, some forty-five thousand aside from those in the activities which have been named, registered their applications for membership in the Volunteer Medical Service Corps and pledged themselves to serve the Government in any professional work, they might be asked to perform; in all about one hundred and ten thousand of the one hundred and thirty thousand legalized practitioners in the whole country. Eighty-five per cent of the profession were in Government service of some kind, or had pledged their sacred honor to serve wherever or whenever those in authority might determine or command. It is impossible to realize the important role that physicians of the United States played in making our country a determining factor in winning the war, until its history is accurately and fully written. President Wilson has said "The health of the Army and Navy and the health of the country at large is due to the co-operation which the public authorities have had from the Medical Profession." And with respect to the service rendered at the battle front, General Pershing has thanked the Medical Corps for its splendid accomplishments and has said that "At the front and in the long chain of hospitals extending down to the base ports, I have watched the fine and unselfish character of the work of the members of the Medical Corps, and the achievements which have added new glory to the noble profession which they have so ably represented. Many of them have shared with the line troops the hardships of campaign conditions and have sustained casualties and privations with fortitude that is beyond praise. No labor was too exhausting and no danger too great to prevent their full discharge of duty."

You are silently thinking why this victory halo about the heads of physicians, or this indulgence in felicitations to and adulations of the Medical Profession. Such has not been the speaker's purpose, only incidently has compliment been intended. This summary of actual attainments has been given simply in the way of inventory. The numbers, the service, and the spirit withal, has been credited, in order that there may arise a clear conception of the possibilities, amazing and immeasurable which may be found in this organized body of scientific men, if they but appreciate that their work is not finished, that the greatness of the deeds done is to be but an earnest of that which they will perform in continued activities in the ripe field of humanity's needs, just now in serious want of forceful men with a vision of the new day that is already dawning.

Achievement does not receive its best reward in rest and retirement, rather in the consciousness of service well rendered, in the plaudits of gratitude and in the assurances of confidence and of faith. It is human to expect much of those who accomplished much. Achievement imposes responsibilities which are binding and inexorable. Now that the war is victoriously ended and its tremendous exigencies past, it would seem for the moment reasonable that inactivity and relaxation might be encouraged. It is not thinkable. In this reconstruction period the obligations of all are greater and more exacting than they ever have

been, and they rest upon physicians with exceeding heaviness. Along the avenues of public health activities it is only logical that medical men because of their special endowment, should assume leadership and face the obligations with determination and confidence. The Public Health is the public's concern, yet it is painful and proven truth, that this vital concern is very indifferently manifested unless awakened and kept continuously aroused by the initiative and energies of those of scientific minds, who are appreciative of the disasters which wait on indolence and ignorance in the dark lanes of contagion and infection and along the easy pathway of indifference and neglect.

OUR DISABLED SOLDIERS

The most sacred obligation, resting with binding force upon both laity and physicians, is that which we owe to our disabled soldiers. For the present the Government through its Medical Department is assuming entire responsibility for their physical welfare and restoration and is giving serious thought to the question of their independence in the future. These soldiers risked all at their country's bidding; their lives have been saved, but their bodies are maimed and incapacitated. They must now face life, its duties and hardships with limited efficiency. They have our affection unbounded and our sincerest sympathies. We think now that we would gladly place them upon pedestals and pay them homage for the rest of their lives. This is known to be a false philosophy and a mischievous practice. Out of the experiences of other countries, France, England, Canada, and indeed out of our own experiences in the Civil War, not as yet wholly forgotten, the fact is positively established that to number these soldiers among dependents and treat them as such is unkindness in the extreme and the very essence by injustice. Independence is the only assurance of genuine happiness, and in this enviable position the government aims to place these disabled men.

"The establishment of self-respect and self-support becomes the keynote of the new regime that is being fostered under national auspices. Not lionization, but opportunity, not free food, but industrial training, not charitable relief, but opportunity in the industrial world, represent the paramount issues that must be met." (Government bulletin.)

The disabled soldier himself has a creed which runs thus: "Once more to be useful, to see pity in the eyes of my friends replaced with commendation, to work, produce, provide, and to feel that I have a place in the world, seeking no favors and given none. A man among men in spite of the physical handicap." This commendable ambition deserves every possible encouragement and assistance. A supreme effort of the Government is being made toward a solution of the difficult problems involved. The best equipped hospitals which it is possible to provide, the best professional talent which the country affords, the most experienced specialists, the best teachers and experts in special departments,—all these agencies have been marshalled in the confident hope that a large measure of success will be attained in restoring these men to health and in a great degree fitted for self-support.

The physical reconstruction is not the only problem which presents difficulties. After this work has been carried as far as possible, disabilities of varying degrees may remain and the question of vocational training must be considered for the enforced changed careers which physical conditions have made necessary. And here psychological difficulties equal-

ling the physical are encountered. It is not every disabled man who speaks with unction the crippled soldiers creed, just read. Some there are who are disinclined to accept vocational training. They reason that "having been wounded, they have a right to permanent assistance by the Government, and there should be no need to fit themselves for a trade." Others decline to accept special training from the "fear that they will not be physically able for the work and will ultimately make a failure of it." An exceptional few there are who are naturally indolent and do not object to living idle lives or to accept the charities of the public, and still others admit to a "fear of reduction or loss of pension if successful in a new vocation," and all are very weary of hospitals and new friends though kind ones. They are homesick and are longing for the old faces and the old acquaintances. It is at this critical stage that all the logic and sophistry and gifts in the art of persuasion, are required of those in authority. And it is just here that the home folks and friends and the family physician should restrain natural inclinations and sympathies and consider it a bounden duty, a serious obligation to co-operate with the government in its policy of holding in the Federal hospitals all soldiers imperfectly restored and illy-fitted for self-support, until both problems are as nearly solved as can be hoped for. In the hospitals the treatment and the training are doubtless superior to that found anywhere outside. "The influences to accept a new vocation are more inspiring, and opportunities for collective and individual persuasion are more readily available."

It is the statement of Surgeon-General Ireland, that corrective work pre-vocational and vocational training, physical exercises and healthful recreations are provided in the Federal hospitals and in every convalescent center for the sole purpose of hastening the cure of our disabled soldiers and returning them to civil life as productive citizens. He makes this appeal, "In France, 80 per cent went back to fight; ninety-eight per cent must return to the industrial army ready and anxious to carry on. Mothers and fathers, sisters, and sweethearts, doctors at home, urge the boys to stick contentedly until their physical reconstruction is complete." To this counsel we should give serious heed.

In the course of time, however, these soldiers will be returning to their old communities and a percentage of them will require "follow up" treatment. The home physicians will then be given their opportunity to make small payment on an obligation. The prophecy is herewith recorded that in their presence, the physicians of West Virginia will "stand attention" and give attendance most willingly, and that notwithstanding the soldiers' creed of "no favors", one exception our physicians will require, that the privilege of rendering service to these saviors of our civilization shall constitute our sole reward.

IMPROVED STANDARD OF PHYSICAL HEALTH

The most astounding revelation resulting from the operation of the selective service act was the deduction from the draft boards' findings, that about one-third of the country's young men were disqualified for general military service, by reason of physical disabilities. The conditions disclosed, were mainly of the preventable type of impairments, with their origin in childhood and the direct result of indifference born of ignorance in the homes or in the schools or in the environments, doubtless in most instances

in all. This discovery occasioned a national shock, and has served to arouse in some degree the national conscience to an appreciation of the supreme importance of a greatly improved standard of physical health and efficiency in the country's citizenry. A comprehensive constructive effort in the direction of education is indicated as an imperative need. Our very ideals must be changed. Mental attainments have been the goal of the school oblivious of the basic essential, the physical foundation, whether it be of sand or of stone, and forgetful of the fact that mental and moral stability as well must rest upon a dependable physical understructure. The glorification of health should be the dominant note in the educational propaganda of the reconstruction period. There is found a measure of encouragement in the evolution of processes educational in the few years just past. It is scarcely a decade, when in this state as in most of the other states of the union, education like religion was deemed to be a question of a free-will choice on the part of children or their parents, and this notwithstanding the immense expenditure by the state for public schools. It would be incredible, if our own eyes had not seen it, that all down the years of our national independence until a decade ago, in this proud country boasting of its educational facilities through its free school system, there should have been tolerated the false doctrine of freedom of decision in school attendance. That large procession of men, one-third of those of military age, who were turned back from their country's service, to their own embarrassment and to their country's loss, were victims of this national mistake. But now compulsory education is universally accepted and its inestimable benefits generally recognized.

MEDICAL INSPECTION OF SCHOOLS

Although it required a century and a quarter of time and deliberation before this progressive step of compulsory education was taken, it is reassuring to know that the next impotant advance required only about five years for the awakening. This was true of West Virginia and the state fairly represents the progress of other states. Under compulsion children were in attendance upon the schools, but that they could see or hear normally, or were well physically, was not deemed a subject of concern to those in authority until somehow and from somewhere the vision came that physical defects which were retarding the progress of the individual in his studies, consuming undue time of the instructor, retarding therefore the progress of the entire class, was a matter that directly concerned the state, and that detection of defects and assistance in correction were essential duties, alike to child and school. And of still greater importance was the conclusion that the victim of an infectious or contagious disease should be early discovered and promptly isolated. No forward educational movement has been followed with results so beneficial as those from the system of medical supervision of the children of school age.

PHYSICAL EDUCATION IN THE SCHOOLS

And now a third great awakening is at hand. It is largely the result of the disclosures of the medical examination of the children. Physical defects and retarding handicaps were found in large numbers, but a more surprising discovery has been made that fifty per cent of the rank and file of pupils, are found to be in a state of under-development as compared with accepted standards of normal weights and measurements.

As the principle of prevention has

come to be recognized as the one rational procedure in the control of all conditions harmful and destructive, the conclusion has been reached most wisely, that in the face of this grave problem physical education is the solution. That it should be made a distinct and outstanding feature of the public schools requirements is a question scarcely debatable. A few states have made it compulsory. This probably is unnecessary in West Virginia. Our laws are broad enough to permit of an interpretation which justifies school boards in providing for the physical side of a child's education and insuring healthful development. These laws, however, are without definiteness as to the character of the instruction and training to be given or the amount of time to be devoted to it. Before any uniformity is possible throughout the schools of the state, or any wide and general improvement noted a definite system should be outlined. If it is not within the province of the state superintendent of schools, it should by legislative enactment, be placed under his jurisdiction.

For the present the whole subject seems to be left to the wisdom of individual boards of the school districts. The initiative and wisdom of some of these boards have been most exemplary. They have met with extreme difficulties of various kinds. They have appreciated, and desire to have emphasized the importance of theoretical instructions throughout the grades in the principles underlying normal growth and vigorous health, the question of the best foods, pure water, fresh air, and the essentials of hygiene and sanitation, but there is also a practical side which is vital. It is regulated and systematized physical exercise, and this requires training and recreation grounds. As a consequence, of the old ideas prevalent when most of the school buildings now in use were erected, exercise grounds are very limited. This is about as true in rural districts as in the city, just space enough for the school house and two small buildings in the rear, and little more; in fact the law has forbidden that for any school, small or large, ground shall not be secured in excess of one acre. Recreation and athletic fields are therefore not available.

One of the cities of the state secured an enactment from the last legislature, creating an exception to this statute, permitting the purchase of as much as ten acres for physical education purposes. That city, with its athletic field, its physical director and adequate assistants, will soon prove, it is confidently hoped, to other communities of the state, an inspiring object lesson of the benefits immeasurable which are possible in a thoroughly organized and well-equipped system of physical development.

A revised school law was enacted by the last legislation and it is believed that one of its provisions will permit of wide discretion to all boards of the state in the right to provide recreation and training fields. The way is therefore open to other cities and communities to move forward at once in this same commendable direction.

The compulsory attendance law is one of great excellence if it is properly, tactfully and judiciously enforced; the medical inspection law has bound up in its provisions illimitable benefits if physicians and nurses responsible for the duties imposes, are equal to them. Physicians should be men well fitted for this peculiar and special work; men of good professional standing, of exemplary lives, and should possess consciences exquisitely sensitive, which will not permit sleep if the responsibilities are shirked, or met superficially and indifferently. The nurse is the strong cog of the wheel in

the medical inspection machinery. With a poor physician and a good nurse much may be accomplished, but with a good physician and a poor nurse, little may be expected. She is the executive. Upon her personality and the measure of her special training, will rest the success or failure of the department. A nurse who has received only the usual advantages of the average training school for nurses is not fitted to make the best school nurse. She should have special training along the lines of public health nursing. And it is incumbent upon the hospitals of the state, that in their training school departments there shall be introduced into the curriculum this special course, if it is not already there.

WHENCE THE HELP TO INSURE PHYSICAL QUALIFICATION IN OUR COUNTRY'S YOUTH

To whom shall we look to provide, and to have skilfully operated these great levers, which shall lift the children of our state to a higher level of physical development, and by reason of it, to larger mental attainments, to greater personal happiness and individual efficiency? We can look in but one direction,—to the red-blooded, wide-awake men and women of the state. And who shall lead them? Who are most familiar with the needs of physically handicapped childhood? Who are best equipped to suggest and supervise the agencies necessary to meet these needs? The reply is already in your minds. The physicians of the state. Physicians who are not interested in the schools of their communities are asleep; their eyes are closed to their great opportunities, and they are failing in their obligations to society. Their place is on the school boards; and there is not one, who will manifest genuine interest in all that concerns the welfare of his local school and is worthy personally, who may not, by the franchise of his neighbors, be placed on his local board at the next election.

If this instimate relationship is not feasible, a sympathetic attitude of mind should at least be manifested and especially is it important to give moral support and encouragement to the medical inspection forces, by endorsing reports, if possible and rendering corrective assistance when indicated.

INFANCY AND MOTHERHOOD

This policy of larger interest in the physical welfare of the children of the schools must meet with the warmest approval of every right thinking individual. At the same time in every logical mind there will arise the consciousness of an incompleteness of the program. By constitutional provision the state is authorized to throw a protecting arm about those of school age, fixing the minimum at six, and provisions are written into the laws, guaranteeing a large measure of paternal care, but to the fair and orderly mind there will arise the thought, that life does not begin at six and that serious thought and tender attention should be given to human life at an earlier age: from conception through foetal period, in birth and in young childhood. Still another awakening has indeed taken place, and this same view has been accepted by Federal and State Governments and a new educational program reaching down below the schools, and into the homes is now being carried on,—the child welfare movement. The Children's Bureau at Washington was enabled through its exceptional activities in 1918 to arouse a nation-wide interest in "Children's Year." It received the co-operation of the Woman's Committee of the Council of National Defense. This committee organized a child welfare department, the chairman of which was the

President of the General Federation of Women's Clubs. In this way the co-operation of women's organizations throughout the states was enlisted.

Seventeen thousand local units with a membership estimated at about 11,000,000 women were brought into active relationship with his movement. This great body of enthusiastic volunteers has inspired unbounded interest. State boards of health have been aroused as well as municipal health boards and civic and social organizations.

Through these mediums statistics and a great fund of general information, resulting from Federal investigations have been given to the public. Figures and facts amazing and impressive have been scattered abroad. This educational campaign is now in progress throughout the entire country. In our own state it is being conducted by skillful hands with great energy and with results which it is believed will be inestimable. It may not be without profit to recite a few of the startling disclosures resulting from Government inquiries. About 15,000 mothers are dying every year in the United States from causes largely preventable. Children under five years of age to the number of about 300,000 are dying annually and those too, from causes declared to be in a great measure controllable. Two-fifths of this number die within the first month of life, dependable mainly upon diseases relative to the neglect of the mother during childbirth and before. Approximately 55,000 deaths were assigned to gastric and intestinal diseases, which imply mistakes in feeding or in food. About one-third of all deaths are attributed to five causes directly related to the lack of adequate prenatal and confinement care;—premature birth, congenital debility, injuries at birth, malformations and syphilis.

Great were the problems of war, but the problems of peace are equally great, and surrounded with difficulties seemingly insurmountable, but if our country is to conserve its human resources, now wasted by indifference, the development of facilities for the protection of maternity and infancy is imperative.

THE NEED OF IMPROVED VITAL STATISTICS

Probably the greatest hindrance to a prompt and effective system in the prevention of illness is the absence of definite information. The statistics just read are only approximately correct because the vital statistics for the United States are very incomplete and unsatisfactory. The assembling of facts relative to deaths and the prevalence of disease have always been deemed a subject for the jurisdiction of the individual states. Many of the states have adopted a vital statistic law, which the Federal Government has had prepared, and which is known as the "Model Statistics Law", but over half of the states have not as yet adopted it. Those which have, fall into what is known as the "Registration Area." From this area comes our accurate statistics. From all the states not included, only estimates as to the vital statistics can be made, based on partial and imperfect information. The fact is therefore, that United States statistics as a whole, are not entirely dependable. We can not utilize them for our own conclusions with full satisfaction, and to our humiliation, other countries ignore them. For example, the little South American Republic of Uruguay, the smallest of the Western Hemisphere, has this to say in its official tables of comparative health statistics, of its largest and oldest sister. It "regrets its inability to draw satisfactory conclusions regarding the United States of America, because that nation

has not as yet attained to any scientific method of treating the subject of vital statistics."

West Virginia is not within the registration area. There has been a failure to adopt the "Model Law". In the legislature of two years ago it passed the senate, but failed to receive favorable consideration in the house. This year our state board of health made another attempt to secure its enactment, but failed in both houses, presumably because of the expense involved to put in operation such a law. A step in the right direction, was made in regard to reporting preventable diseases by amending an existing law, and requiring of physicians prompt report of these cases to local health authorities. It is to be hoped that serious heed will be given to this requirement, and not be ignored and forgotten as is so often true of a similar law with respect to birth reports. But the Federal Government's "Model Law" would provide a machinery which gives assurance of the law's enforcement and guards more certainly against the indifference and neglect of physicians and parents.

The United States will not place our state in the registration area until this law is adopted. Halfway measures will not place us there. It is most desirable that we should be in line with the progressive states of the Union in this matter. If this Association will move as a unit and demand the enactment of this law by the next legislature, it will be written upon the statute books without further delay. It is our obligation, therefore to act with unanimity and determination. Upon the passage of a law making our vital statistics dependable, there will be laid the foundation for genuine progress along scientific lines, in the warfare against infant mortality, as well as in other fields of public health activities.

Births must be promptly and universally reported before any system can be established which will provide for the investigation and care of mothers, and infants in need of assistance. With this information in the hands of the Health Commissioners of cities and counties and one additional force provided, the machinery for efficient public health service will have been established. That essential addition is the public health nurse. Infant salvation with respect to this world, rests largely in the hands of conscientious, specially trained nurses, cooperating with our health departments. Every department should have associated with it, one or more. When births are reported by physicians, or by parents and midwives and the circumstances give rise to the suspicion of a need for council and guidance in the interest of mother and child, the nurse is the logical entering wedge into the difficulties and necessities of the situation.

Again, in the presence of contagious and infectious disease, instead of the placard upon the door, or with the placard, the nurse should be the solution of the problems presented, by advising and teaching and convincing with respect to the efficiency and reasonableness of the simple laws of sanitation. With a perfected system of birth, death and morbility reports, with an efficient health department, and with specially trained assistants, even yet the best results to mothers and infants are not possible unless a center has been provided, preferably in association with the general hospitals, to which indigent patients can be directed by the health authorities. Especially is a dispensary a requisite to the best results with respect to prospective mothers and new-born children, whose conditions

demand council and treatment, and whose circumstances forbid the constant attention of a family physician. Every large community has a goodly percentage of this element and a well organized dispensary will aid materially in the solution of their professional needs. Such reforms as are here indicated will not occur by accident. They will be instituted by county and municipal authorities when convinced of the necessity for them. And again it is true that it is upon the men who really know the facts and conditions, upon the physician of a community, which rests the obligation of presenting the argument for progressive changes, and of driving home conviction to those responsible for the administration of public health organizations.

VENEREAL DISEASE PROBLEM

Child life is exposed to grievous hardships and burdens, varied in form and in severity, which are now appealing to the manhood and womanhood of our country as never before. Sympathies were never so deep, nor determination so strong to lessen these burdens and right, as far as possible, these wrongs. Of all the gross and gruesome wrongs, none are so deplorable as those resulting from the sins of the parents, "which are visited upon their children even to the third and fourth generation."

Probably the greatest lesson of the war to the general public, is the revelation of facts relative to the prevalence and the ravages of the social diseases, and also the reassuring evidences of their prevention and control under proper regulations and constant vigilance.

Physicians have known of the disastrous effects of these loathsome maladies; one causing every year thousands of cases of blindness among infants and occasioning countless surgical operations on women, producing lasting impairment of health and blighting the hopes of motherhood. They have known that another is capable of being transmitted from parent to offspring and that this pernicious syphilitic inheritance will cause physical and mental defectives of a hopeless type; that it is often the cause of serious forms of paralysis, of brain softening, of insanity, of grave diseases of the blood vessels and of the heart and other vital organs. But the people generally were not aware of these conditions and remedial measures were not considered, but the draft board's findings and the disclosures of the camp examinations made clear the gravity of the venereal problem and the lamentable failure of the pre-war attitude toward the subject. It is an amazing statement even to physicians, which comes from a report of the Provost Marshall General, that five per cent of the adult male population of the United States are syphilitic. Some authority has said that the clearest lesson of the war is that "our ignorance and failure in handling the problems of venereal diseases, constitute the greatest crime of the American civilization." The marvellously successful military management of this difficult question, resulting in keeping our army almost free of these infections and sending our soldiers home physically untainted and with minds enlightened upon the whole question of social hygiene, must now inspire the public to grapple with this subject, which has been demonstrated to be a civilian problem. "The campaign begun in war to insure the military fitness of men for fighting must now be continued to save men for civil efficiency," as well as to promote the great moral issue in which is wrapped up the welfare of our country's youth. The light has been let in upon this subject heretofore shrouded in darkness, and now the simple proposition is, shall we live up to the light we

have? Never was greater challenge issued to the American people. Our state board of health with the assistance of the Federal Government, has established a Bureau in the interest of this campaign which is to be a veritable warfare against this national evil. We shall learn of its program at this meeting, and hear the appeal of its representative for our assistance and co-operation. We should respond with positive assurance of our most sincere and faithful support, and more than this, that it shall not be fleeting and sporadic. We should enlist in this war for life with all the zeal, and energy and conscience for which our profession is famed, whenever humanity cries and the most sacred interests of home and family are in peril.

ATTITUDE OF THE PROFESSION ON THE PROHIBITION QUESTION

One of the strongest reasons for believing that genuine progress is assured in fighting the vice infections is that their chief center of origin, commercialized social vice, is about to lose its twin companion in evil, the liquor traffic, which is shortly to find itself in the shackles. An official of the Surgeon General's Department has made the statement that these two evils are logically classed together. "In the spread of venereal diseases they go together. The liquor traffic in numerous ways is the fosterer of prostitution. And the effect of alcoholic liquor is a factor that can not be overlooked in the diffusion of venereal diseases because of the inhibition which it produces in those restraining influences that under ordinary conditions prevent one's giving way to his impulses."

General Leonard Wood is responsible for the statement that about "eighty per cent of the vice diseases are traceable to the use of alcohol." For this and countless other reasons, the alcoholic question falls under the classification of Public Health Problems. It is the opinion of the President of the American Medical Association, Dr. Arthur D. Bevan, that "the greatest simple factor that we can control in the interests of the Public Health of the nation, would be the elimination of alcoholic drink." Dr. Charles Mayo, retiring president of the American Congress of Surgeons, has expressed himself as holding to a like belief.

Prohibition is assured as a war measure July 1, and if the war should be declared ended and that order be revoked constitutional prohibition is but a short distance in the future. What is to be the attitude of the profession upon this great issue? Our leaders have spoken, and no voice of protest has been heard. Our quiet acquiescence has been given, but this is not sufficient. We should stand ready to give the enforcement of the law our moral support in a firm and outstanding manner, as individuals, and in our organized capacity through county societies and through the state association. The substance of Bolshevism is defiance of statutory and constitutional law, and the substitution of individual license. There is a growing evidence that this very spirit will be manifested toward the prohibitory regulations which will soon be in force, and not by the lawless foreign element in our country alone, wholly unfamiliar with our republican, majority-rule, form of government, but by an element in the business and social world, who hold their heads high. If that spirit should become prevalent in the private and club life of our communities, it should be frowned upon and severely condemned. Let those withhold their censure of the bold lawlessness of the Bolsheviki and cease their bemoanings over his wild orgies on American soil,

who themselves defiantly violate the letter and the spirit of the state and national prohibitory laws.

THE TUBERCULOSIS PROBLEM

Of all the public health problems with which the nation has been struggling, tuberculosis stands out as the most prominent. Organized efforts has been exerting a powerful influence toward its control throughout all the states. An educational propaganda has been conducted for a number of years with encouraging results. The activities in West Virginia make an interesting story. An Anti-Tuberculosis League was organized about ten years ago and has accomplished much in an educational way, and in a constructive sense, by influencing favorably helpful legislation. Our State Board of Health has given constant attention to the subject and aided greatly in the achievements which have been attained. With respect to what has been accomplished and what the present situation is, we will hear later from the executive secretary of the league, Dr. Jones, the one who best knows the history of the work, for she has been in no small measure responsible for the making of it.

This important subject therefore will not be considered here, with the exception of a single phase of it, which has received comparatively little attention in West Virginia, Bovine Tuberculosis. As is well known, this is a form to which children especially are subject, and it should therefore, receive our most serious attention. Being acquired from cattle, the infection is received chiefly through milk and its products. This being young children's principal food supply, it becomes clear why they are the surest victims. Direct from a government bureau is secured this information. "Tuberculosis of this origin represents about 25 per cent of all cases of the disease in children under five years of age, one case in every four. Tuberculosis in children is very different from that in adults. As a rule it affects the glands and the bones, and it has its entrance in the great majority of cases through the digestive tract. About 90 per cent of tuberculous glands of the neck in young children are of the bovine type and the bacilli have their entrance through the tonsils. About 75 per cent of bone tuberculosis in children are of this type, as well as a large percentage of abdominal tuberculosis and tubercular meningitis." We have been inexcusably slow in appreciating the etiological importance of the bovine origin in the tuberculous afflictions of childhood. This explains our slowness in applying the remedy. It is indeed a reproach that it is true, but now that the remedy is available it should promptly be applied.

The prevalence of tuberculosis in cattle is much greater than is generally believed. The following is a quotation from a publication of the Bureau of Animal Industry, Washington. "A serious percentage of the dairy cows of the continent are affected with tuberculosis. It is no uncommon thing to find as many as 70 or 80 per cent of the cows in a herd diseased."

Two ways are open by which to control this menace, destroy the infected cows, or pasteurize the milk. Universal pasteurization seems impracticable. The same argument might be made with respect to our water supplies. It could be said that there is no occasion for expensive purification and filtration plants, simply insist upon universal boiling. We know it will not be done. Nor is it probable that pasteurization of milk can be made general. Destroying the danger radically is the sensible plan.

For some time the Federal Government has stood ready to co-operate with

state governments in the eradications of Bovine Tuberculosis by destroying the diseased cattle. It is an entirely feasible proposition. For reasons not very clear our agricultural department through which such work must be done has persistently failed to accept the governments terms and conditions. When our legislature convened in January of this year, an inspiration of Wheeling's commissioner of health, Dr. Williams, convinced the president of the Ohio County Medical Society, Dr. Keesor, that there might be some way found to compel co-operation of state authorities with the Federal, in this urgent matter. A committee of the society, with the president of the State Association as to its chairman, had a bill drafted, which being unanimously endorsed, was presented at Charleston. It was then discovered that legislation sufficient to meet the situation already existed. Very considerable agitation continued, however, and those in a position of responsibility awakened. As a result a co-operative basis was established between Charleston and Washington which makes it practicable for this work to be successfully carried on. The expense is to be met by the two governments. The necessary appropriation was made to meet the state's proportion of that expense. The owners of infected and condemned cattle are to sustain no loss and are at no expense for herd examinations. Hence there can be no objection to co-operation from the cattle owners. The situation is now this, in brief. Any health department which should decide to limit the distribution of milk, within its jurisdiction to those supplies which come from tested herds only, will in taking this step, precipitate action at once, among the dairies of that section. There is every assurance that their appeal to the commissioners of agriculture at Charleston will receive attention. If the municipalities of the state will introduce into their pure food regulations this anti-tuberculosis milk provision, they will give such impetus to the cleaning up movement, that the state will be freed of tubercular cattle in a very short time. Now is the opportunity for a truly progressive movement in the battle against this greatest of plagues. It is to be hoped that all the influence and power of this association will be exerted in behalf of this most promising measure of tuberculosis prevention.

SHALL POST-WAR RETRENCHMENT HANDICAP PUBLIC HEALTH ACTIVITIES

Consideration has been given in this discussion to but a small part of the government's program in public health affairs. A score of other important issues are now receiving its serious attention. Unfortunately in the very height of its great activities, and when the needs are urgent as never before, arises the cry of "retrenchment, curtailment of expenditures, back to a pre-war basis."

This was the spirit and the action of the appropriation committee of the congress which adjourned in March. There was a failure to pass the Sundry Civil Bill and therefore no final decision was reached on the appropriation for the public health service. Had it passed as recommended by the committee the plans and hopes of the department to meet the stupendous demands of this reconstruction period would have been decidedly shattered. To illustrate, a few of the requests made an dthe results may be given. The Public Health Service asked for $300,000, to be utilized to study infectious diseases in man, influenza being prominent in the department's thonght. The committee cut the estimate 70 per cent. $500,000 was asked in the interest of rural sanitation, $50,000 was recom-

mended. About $1,000,000 was asked for the venereal disease campaign, $200,000 was recommended. Down the entire list of requests, like reductions were made. It is not thought that any spirit of antagonism toward the public health service was reflected in the action of the committee. It represents simply the general policy of retrenchment, which is believed to be necessary in order to return to normal peace conditions. However, "it is most unfortunate that the attempt is apparently being made to effect horizontal reductions rather than to consider each activity in relation to the post-war needs of the country. From the latter standpoint the activities of the public health service surely demand expansion and development rather than curtailment." (A. M. A. Journal.) These questions will be taken up anew by the congress which is soon to convene and will be again considered by the new committee on appropriations.

Is it not an imperative duty upon us, as an association of medical men, conscious of the extreme importance of unabated interest in our government's public health activities, that we petition our own senators and congressmen to use their influence to prevent this step of retrogression, which the public health service will be compelled to take if its appropriations are materially reduced? Your consideration of this suggestion is most earnestly requested; and furthermore that our representatives to the meeting of the American Medical Association in June be instructed to report our action to the House of Delegates and urge like action upon that greater body of physicians,—that congress be petitioned to give special consideration to the appropriations for the public health service.

SHALL THE SPIRIT AND SACRIFICES OF OUR SOLDIERS BEAR FRUIT?

It seems incredible, and simulates the voice of blasphemy to even intimate, that the echoes of the great war's sacrifices shall quickly die away or that the spirit of the brave defenders of our ideals shall soon be forgotten, so deeply burnt are they into our very souls. Mercy and justice and honor, the great principles which make life dear, have been vouchsafed to the nations of the earth. If these fruits of victory are to be international principles to govern the nations of the world in their mutual relationship only, and are not to grip the heart of every separate nation, which shall in turn vouchsafe these cherished principles to the very life of its people, then are we the victims of a delusion. In Holy Writ it is recorded that he who looks not after his own household is worse than an infidel. The same is true of a nation which looks not after its own people, and especially in this new day of marvelous inspiration, born of the deeds of glorious arms. Shall tyranny and despotism be crushed to earth in Europe, while in America, childhood continues in the thraldom of countless needless ills, and "the pestilence which walketh in darkness" goes on unhindered, and the ignominy of ignorance, with its progenies, be tolerated without a blush? God forbid! Forbid that any such national or state infidelity shall be manifested toward the weak and unfortunate and dependent elements of our land. Forbid that parsimony shall come to sit in the seat of patriotism or that the lethargy of the olden days toward life and health shall ever return to these dear United States.

TRANSACTIONS OF THE HOUSE OF DELEGATES

Clarksburg, May 19, 1919.

The House of Delegates was called to order by President Robert J. Reed, at 10:45 p. m.

The minutes of last meeting were read and approved.

The report of Committee on Arrangements was passed over, Dr. Sloan, chairman, being absent.

The Committee on Scientific Work was presented by Dr. C. R. Ogden, who distributed programmes and spoke briefly of the efforts of the committee to procure an excellent and diverse list of papers and that he felt their efforts had been crowned with success, which statement would be amply demonstrated as the programme was unfolded.

Dr. Bloss was then called upon to report the results of the labors of the Committee on Publication. He made a very complete and satisfactory verbal summary of his written report, which he submitted with his financial statement to the Auditing Committee of the Council. In this summary he showed that *The Journal* through its receipts from advertising, etc., had practically paid for its publication during the period covered by his report.

The reports of these committees were received and formally approved with thanks to the committees.

The report of the Committee on Public Policy and Legislation was then asked for. No member of said committee being present, this was deferred.

The Secretary's report was then made, the order of business and Secretary Anderson responded with the following report:

REPORT OF SECRETARY

Sober thankfulness and restrained joyfulness should be the key note of this assemblage.

When last we met, the black clouds of cruel war hovered over and enveloped our fair land from border to border, while pestilence swept it from the Atlantic to the Pacific and from the Great Lakes to the Gulf of Mexico. At that time, almost one-third of our membership were either actually doing so or were awaiting orders to face mutilation and death midst the carnage of shot and shell in the seething caldron of European battlefields. while the other two-thirds were valiantly straining every nerve in a life and death struggle with the greatest plague our country has faced in many years, if not since its birth—The Flu.

During these dark days, the members of our noble profession, true to the traditions of the past, acquitted themselves like men, kept their escutcheons untarnished, and added new laurels to those won by their predecessors in days gone by.

But this brave struggle required of us its grewsome toll, for I have reported to me by the secretaries of our component societies eighteen deaths occurring during the year 1918. Their names are Drs. H. W. Daniels and G. C. Rodgrs of Barbour-Randolph-Tucker Society, Drs. G. C. Shuler and A. L. Grubb of Eastern Panhandle Society, Drs. Percival Lantz and J. W. Judy of Grant-Hampshire-Hardy-Mineral Society, Dr. S. M. Mason of Harrison County Society, Dr. T. L. Barber of Kanawha County Society, Dr. W. H. Sands of Marion County Society, Dr. W. H. Woodruff of Marshall County Society, Drs. H. C. Goings and H. R. Parker of Mingo County Society, Drs. Charles Frissel, W. P. Megrail, and L. K. Geacraft of Ohio County Society, Dr.

R. E. Jarrell of Raleigh County Society, Dr. G. O. Quesenberry of Summers County Society, and Dr. C. M. Arnold, of Taylor County Society.

Some fell at the hands of the despicable Hun, while others succumbed to the deadly thrust of the flu.

Let us, with one accord, do homage to our fallen brethren. Let us enshrine them with adoration in the recesses of our hearts.

But today everything is changed. Victory has perched itself upon our national banners, while the dove of peace is once more hovering over our land, and our country is practically free from death-dealing epidemics.

We should rejoice. We should be thankful. But let this joyfulness and thankfulness be sobered with the thought that even now grave demands are made upon us professionally and socially in this great and most important Reconstruction Period. Let us not relax in our efforts, but prove our metal in times of peace as well as in war, in times of social unrest as well as in times when unanimity of purpose is welded in the forges of necessity. Let us play well our part and lend our strength and influence which is by no means small, on the side of right. justice and humanity.

During the year 1918, in spite of the vicissitudes of war and the ravages of pestilence, the West Virginia State Medical Association has continued to show steady growth and satisfactory vitality. This is evinced by the fact that, during the year we have added one new Component Society and have slightly increased our membership. In this connection it is gratifying to note that our membership has had a steady growth since 1914. In 1915 we issued 902 membership certificates, in 1916 the number was 909, in 1917 we made it 946, and in 1918, the year covered by this report, we issued 957 membership certificates.

However, we should not now fold our hands in satisfaction, but should press forward, and as the men are coming home from military service, let us make our slogan—*One Thousand Members by* 1920. We can only do this if the councillors of each district and the secretaries of each component society rally around them their workers and establish a systematic campaign to attain our goal. This is absolutely necessary because of the unusual restlessness of the profession and the great tendency now prevailing amongst the physicians of this and other states to change their respective locations. So let us resolve to make an effort to get every reputable physician within our bailiwick identified with our Association.

Since our meeting at Martinsburg we have received a number of 1918 dues and to the present date 692 dues for 1919. These dues have been turned over to the Treasurer as follows:

Date	No. of Dues	Amount
January 20	6	$36.00
February 8	56	272.00
March 4	50	246.00
March 24	116	545.00
April 19	330	1625.00
April 19	17	58.00
May 17	123	603.00
Total	698	$3385.00

From the above we see the necessity our former members, who have not yet paid their 1919 dues, to do so at once and to gather in as many new members as possible, not only to protect the integrity of our Treasury, but to insure a membership of One Thousand by the close of 1919.

Your Secretary has made repeated efforts to obtain an accurate list of all

members of the Association, who have served or are serving in the United States Army and Navy, with unsatisfactory success. We sent out a blank questionaire covering this and other desired information, to the secretary of each component society and only twenty-four out of thirty-one possible answers were received. No response has been received from Braxton, Brook, Cabell, Hancock, Mercer, Nicholas-Webster, and Taylor Societies. May we not have these reports so that we can complete an accurate honor roll, that may be placed in our archives and thus record the patriotism and self-denial of those physicians who responded to the call of their country in time of distress.

May we not urge all members to pay their dues early each year, i.e., before April 1, all secretaries of component societies to make out requested reports promptly, and all councillors to take a more active interest in the welfare of their districts all through the year, so that, by team work, we may become more efficient as an association.

Much as we are wrapped up in the growth and progress of our association, let us remember that there are other questions of vital importance to us as individuals and collectively as an association, which should receive our earnest consideration and upon which we should take definite action, or so inform ourselves upon them that, when necessary, we can do so with a dignity in keeping with our organization. Amongst such we may name: The United States Public Health Service Budget, Health Insurance, Industrial Medicine, The Tuberculosis Situation, Venereal Disease Control, Model Vital Statistics Law, etc.

Expressing my appreciation of the earnest co-operation of the officers, councillors, secretaries of the component societies, and Harrison County Medical Society in my work as secretary this year I respectfully submit the above report.

J. HOWARD ANDERSON, *Secy.*

The secretary's report was officially received and referred to the following committee appointed by President Reed: Drs. W. W. Golden, C. O. Henry and C. R. Ogden.

The Treasurer's report was then made the order of business and Treasurer Nicholson responded giving a summary of his written report, which he had already presented to the council for the inspection of the Auditing Committee, and which will appear in full in the transactions of the council. This summary showed cash on hands in the General Fund $1,066.23, in the Defense Fund, $4,988.70, and in the Indigent Fund, $1.076.00.

His report was received and approved with thanks.

Chairman G. D. Jeffers of the Council was then called upon for a report of the doings of this body. He responded and outlined the work which had been accomplished and pointed out matters which would be taken during this session and upon which he would report later to the House of Delegates. This report was officially received and approved.

The House of Delegates then adjourned at 11:40 to reconvene at the call of the President.

MAY 20.

The House of Delegates was called to order by President Reed at 7:30 p. m. The minutes of the preceding meeting were read and approved.

The report of the Committee on Public Policy and Legislation was again made the order of business, but the committee was not ready to report.

The Committee on Workman's Compensation was then asked for its report.

Dr. W. W. Golden, chairman, responded with a most able, comprehensive, and instructive report. He told how the committee had made repeated efforts to secure personal reports of the grievances of members of the association against the present operation of the Workman's Compensation Law, how these cases were tabulated and brought to the attention of the commissioner, how by letter and personal interview the committee had striven to have these matters adjusted on a definite scale or according to a definite plan, and how they had invited the commissioner to meet with them at various times and especially at this meeting in order that these grievances might be discussed and a better understanding and more hearty co-operation established. He also read a letter recently received from the commissioner in which the commissioner's office claimed such a conference was not necessary and could not prove of any material benefit.

He closed with an appeal on behalf of the committee for some definite co-operative action on the part of the association with the State Hospital Association.

This report was officially received and approved by the House and the committee was thanked for the great effort it had put forth in behalf of the association members.

Dr. Guthrie then moved "that a committee be appointed to co-operate with a like committee from the State Hospital Association, and that this committee in conjunction with said State Hospital Committee, be empowered to employ an attorney to look after the interests of both associations." This motion was seconded by Dr. A. P. Butt. A number of delegates were immediately upon their feet seeking recognition of the chair to discuss this motion, but as it was time for the opening of the General Session, President Reed recognized Secretary Anderson, who made a motion to adjourn until 10:30 p. m. This was seconded by Dr. Vest and was carried.

The House of Delegates was convened at 10:30 p. m., by President Reed, as per motion at last session. The minutes of the last meeting were read and approved.

Dr. Reed then declared the motion of Drs. Guthrie and Butt before the House for discussion. After a thorough discussion of the ways and means of best handling this important matter, upon the motion of McDonald and seconded by Henry, the Guthrie motion was laid upon the table. Upon motion of Henry and seconded by Anderson the matter was referred to the council for consideration and recommendation.

House of Delegates adjourned at 11:50 p. m., to reconvene at the call of the President.

MAY 21, 1919.

The House of Delegates convened at the call of President Reed at 1:15 p. m. The minutes of the preceding meeting were read. Motion was made and carried that "the discussions relative to the Guthrie motion be expunged from the minutes." The minutes were then approved.

President Reed then called upon the Secretary to read the recommendations of the council on the appeal of the Workman's Compensation Committee. Secretary Anderson responded with the following:

"*Be It Resolved;* That the Council of the West Virginia State Medical Association recommend to the House of Delegates, that the settlement of the grievances against the Commissioner of Workman's Compensation be referred back to the present committee on Workman's Compensation, and that they be instructed to prepare a list of such facts as may show discrepancies in fees paid for the

same work in the past, and present them through an attorney or otherwise to said commissioner, asking for a definite ruling as to the fees for certain work and when these fees are to be paid and when not.

Further, that said ruling shall be published in *The Journal* for distribution.

And further, that the expense of the above procedure by said committee shall not exceed fifty dollars, one-half of which is hereby appropriated out of such funds of the association as are available, and that they must look for payment of the other half to the State Hospital Association with whose Workman's Compensation Committee they are hereby instructed to co-operate."

By motion of Dr. S. D. Hatfield and seconded by Dr. H. R. Johnson, this resolution was adopted by the House of Delegates.

Dr. J. N. Simpson, Dean of the Medical School of the University of West Virginia, then offered the following resolution:

"*Be It Resolved*, That a committee of three be appointed who shall make visits to the University at appropriate times for the purpose of inspecting the work of the School of Medicine, and make to the president of the Board of Regents, such recommendations as will tend to improve the work of the school and help in its further development."

This resolution was seconded by Dr. H. R. Johnson and adopted by the House of Delegates.

Drs. Robert J. Reed, H. R. Johnson and J. Howard Anderson were appointed as the personnel of this committee.

The committee on the Secretary's report then presented the following report through its chairman:

"The committee on Secretary's report begs leave to say that the sentiments, facts, and figures contained therein are of exceptionally great interest to the members of the association, and recommend that the report, when published, be carefully read by every member, especially that part of it touching upon the prompt payment of dues and the systematic effort to increase our membership."

(Signed) W. W. GOLDEN, *Chr.*
C. O. HENRY.
C. R. OGDEN.

This report was officially received and approved and committee discharged with thanks.

The House of Delegates then adjourned till Thursday morning, May 22.

MAY 22, 1919.

The House of Delegates was called to order at 9:15 a. m., by President Reed, and after the reading and approval of the minutes of the preceding meeting the election of officers was declared the order of business.

The following nominations were made:

President—H. R. Johnson, Fairmont.

First Vice-President—B. F. Shuttleworth, Clarksburg.

Second Vice-President—W. E. Vest, Huntington.

Third Vice-President—Joseph L. Miller, Thomas.

Secretary — J. Howard Anderson, Marytown.

Treasurer—H. G. Nicholson, Charleston.

As only one name was offered for each office, by motion, the Secretary was instructed to cast the unanimous ballot of the House for these men and the President in turn, declared each man elected and called upon him for remarks. Each in turn responded expressing their appreciation of the honor conferred and pledged their loyal services.

The following men were then unanimously elected as members of the Coun-

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., July, 1919.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription . . . . . $1.50 per year
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—Robert J. Reed, Wheeling, W. Va.

FIRST VICE-PRESIDENT—J. Frank Fox, Bluefield, W. Va.

SECOND VICE-PRESIDENT—S. M. Mason (deceased), Clarksburg, W. Va.

THIRD VICE-PRESIDENT—C. M. Hawes, Huntington, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A. FOR 1918-1919—F. LeMoyne Hupp, Wheeling, W. Va.; Alternate—Henri P. Linz, Wheeling, W. Va.

DELEGATES TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg, W. Va.; Alternate—W. W. Golden, Elkins, W. Va.

COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; H. P. Linz, Wheeling, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; L. H. Forman, Buckhannon, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; J. E. Rader, Huntington, W. Va., two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, W. Va., one-year term; E. H. Thompson, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—H. L. Goodman, Charleston, W. Va., one-year term; Charles O'Grady, Charleston, W. Va., two-year term.

cil to succeed those whose term expires December 31, 1919.

First District—C. G. Morgan, Moundsville.

Second District—J. C. Irons, Dartmoor.

Third District—C. R. Ogden, Clarksburg.

Fourth District—G. D. Jeffers, Parkersburg.

Fifth District—J. E. McDonald, Logan.

Sixth District—R. H. Dunn, Charleston.

It might be well to state here that these men were elected to serve for the years 1920 and 1921, while the Councillors elected last year for the years 1919 and 1920 are as follows:

First District—H. P. Linsz, Wheeling.

Second District—C. H. Maxwell, Morgantown.

Third District—L. H. Forman, Buckhannon.

Fourth District—J. E. Rader, Huntington.

Fifth District—E. H. Thompson, Bluefield.

Sixth District — Charles O'Grady, Charleston.

It was moved and seconded, but not carried, that we pass over the election of A. M. A. Delegate. Nominations for A. M. A. Delegate for the years of 1920 and 1921 were then in order.

Drs. W. W. Golden, Elkins, J. E. Cannaday, Charleston, C. S. Hoffman, Keyser, and H. P. Linsz, Wheeling, were placed in nomination.

After several ballots H. P. Linsz was elected delegate, and W. W. Golden and J. E. Cannaday were elected alternates.

Dr. G. D. Jeffers then, in a very graceful little speech, invited the association to meet at Parkersburg in May, 1920, as the guest of the Little Kanawha and Ohio Valley Association. This invitation was accepted by the association.

The committee on the President's Address then offered the following report through its chairman, Dr. S. S. Wade:

"House of Delegates, State Medical Association of West Virginia.

Gentlemen: — Your committee has carefully read the address of President Reed, and beg to submit the following recommendations:

1. We recommend that Boards of Education be urged to exercise the right they now possess to further extend medical inspection of school children, by the best available medical men, assisted by nurses especially trained for this work.

2. Your committee believes it to be of prime importance that the "Model Statistics Law" be enacted at the earliest possible date, in order that our state may take its proper place in the registration area of the nation.

3. The campaign against venereal disease, begun in the war, to insure the military fitness of men for fighting, must now be continued to save men for civil efficiency, as well as to promote the great moral issue in which is wrapped up the welfare of our country's youth.

Your committee believes that this association should respond with positive assurance of our sincere and faithful support in the campaign against venereal diseases as outlined in the program of the United States Public Health Service, in co-operation with the State Health Department.

4. In view of the alarming prevalence of tuberculosis among milk cattle, your committee recommends that the State Health Authorities and the municipal health boards introduce in their pure food regulations an anti-tuberculosis milk provision, in order to give such impetus to the cleaning up movement that the state may be freed of tuberculous milk cattle.

5. Your committee believes it to be the imperative duty of this association to petition our senators and congressmen to support the estimates of the United States Public Health Service, and that the American Medical Association be memorialized on this subject through our delegates. We do not believe that this department should be included in any policy of retrenchment.

6. Your committee further recommends, that President Reed's address be accepted as the voice of this association and that our committee on legislation be directed to work toward the accomplishment of the purposes set forth therein. We recommend also, that the State Board of Health be requested to have published, for immediate distribution 5,000 copies of President Reed's address.

(Signed) S. S. WADE, *Chr.*
M. B. WILLIAMS.
J. ROSS HUNTER.

This report was officially received, approved and the committee discharged with thanks.

President Reed then called for the report of the Lind committee with recom-

mendations of the council. Dr. Ogden, chairman, responded and presented in full the recommendations of the council, which appear in the transactions of the council of May 20. These recommendations were favorably received and adopted. The committee were continued with the addition of Dr. J. R. Bloss, and were asked to proceed as speedily as possible to carry out the proposed plan.

The Committee on Public Safety and Legislation then made a brief verbal report through Dr. A. P. Butt. The report was approved.

Dr. Butt then called attention to Sec. 3, Article IX, of the Constitution which reads: "The officers of this association shall be elected by the House of Delegates on the morning of the last day of the annual session, but no delegate shall be eligible to any office named in the preceding section except that of councilor, and no person shall be elected to any such office who is not in attendance upon the annual session, and who has not been a member of the association for the past two years." He said that it was most difficult to observe this and that he feared it had been repeatedly disregarded and that he would move that it be placed on the table for consideration and amendment at the 1920 annual session. This motion was seconded by Dr. Anderson and carried. Official votes of thanks were then unanimously passed and extended by the House of Delegates to the following:

Drs. Edward H. Richardson, Baltimore, B. Merrill Ricketts, Cincinnati, Charles A. L. Reed, Cincinnati, G. A. Hendon, Louisville, Alexius McGlannan, Baltimore, and Lieut.-Col. David Silver, Washington, Assistant Surgeon H. S. Mustard, Washington, and Mrs. Dean T. Dillon, Charleston, for their presence with us as guests and their excellent papers and participation in the general discussion during the meeting.

The Harrison County Medical Society, their arrangements committee, their entertainment committee, and their ladies committee who extended such boundless hospitality and entertained us so royally.

The hotel management of the Waldo.

The newspaper fraternity of the City of Clarksburg.

The House of Delegates then adjourned sine die.

J. HOWARD ANDERSON, *Secy.*

TRANSACTIONS OF THE COUNCIL

May, 1919.

The Council was called to order by Chairman G. D. Jeffers at 10 p. m., May 19, 1919. Drs. Jeffers, Johnson, Ogden, McDonald, Reed, and Anderson responded to the roll call. The minutes of the last meeting were read and approved as read.

The report of Editor Bloss was made the order of business and Dr. Bloss responded with the following report:

"Gentlemen:—

In submitting to you my report for the period from July 1, 1918, to April 1, 1919, there are many things which come to mind which we might bring up for consideration. It is hardly necessary however, that we consume time with these matters since they will be brought up from time to time in the House of Delegates, the Council and the general meetings.

The financial report of the *Journal's* activities for the above period is as follows:

CR.

Received from advertisers	$1506.85
Sale of Journals and subs	25.77
Uncollected advertising	53.93
Balance carried	430.80
Total	$2017.35

DR.

Publishing Journals (postage)	$1511.35
Postage	5.00
State Journal Subs	4.00
Total	$1520.35
Balance	$ 497.00
	$2017.35

The receipted bills with cancelled checks attached are submitted to the Auditing Committee of the Council.

J. R. BLOSS, *Editor.*

The Treasurer's report was then called for by Chairman Jeffers. Dr. Nicholson being present, rendered the following report:

Charleston, W. Va., May 17, 1919.

Hugh G. Nicholson, Treasurer, in account with The West Virginia Medical Association.

1918—	
Nov. 4, by check Lohmeyer-Goldsmith-Patterson Co.	$10.00
1919—	
Jan. 18, by check Tribune Ptg. Co.	4.65
Jan. 18, by check J. H. Anderson, postage	45.76
Jan. 18, by check A. P. Butt, postage	7.92
Jan. 18, by check J. R. Bloss, salary	500.00
Feb. 18, by check A. P. Butt, council	23.78
Mar. 20, by check, Welch Ptg. Co.	31.44
May 16, by check H. G. Nicholson, salary	100.00
May 16, by check Whitehead & Hoag Co., badges	52.00
May 16, by check J. H. Anderson, postage	24.30
May 16, by check J. H. Anderson, salary	500.00
May 16, by Amt. to Med. Def. Fund	488.00
May 16, by Amt. to Indigent Fund	568.00
May 17, by cash in bank	$1,066.23
	$3,422.08

DR.

1918—	
Sept. 28, to cash balance in bank	$641.08
1919—	
Jan. 23, to check from J. H. Anderson, dues	36.00
Feb. 11, to check from J. H. Anderson, dues	272.00
Mar. 8, to check from J. H. Anderson, dues	246.00
Mar. 28, to check from J. H. Anderson, dues	545.00
April 21, to check from J. H. Anderson, dues	1,682.00
	$3,422.08

MEDICAL DEFENSE FUND

DR.

1918—	
Sept. 28, to balance in fund	$4,550.70
1919—	
Jan. 20, to amount from Gen. Fund	8.00
Feb. 8, to amount from Gen. Fund	44.00
Mar. 4, to amount from Gen. Fund	46.00
Mar. 24, to amount from Gen. Fund	81.00
April 17, to amount from Gen. Fund	309.00
1919—	

CR.

Feb. 18, by check A. P. Butt	50.00
May 17, by balance in fund	4,988.70
	$5,038.70

INDIGENT FUND

DR.

1918—	
Sept. 28, to balance in fund	508.00
1919—	
Jan. 20, to amount from Gen. Fund	5.00
Feb. 8, to amount from Gen. Fund	56.00
Mar. 4, to amount from Gen. Fund	50.00
Mar. 24, to amount from Gen. Fund	116.00
April 17, to amount from Gen. Fund	341.00
May 17, by balance in fund	$1,076.00

Chairman Jeffers appointed Drs. J. E. McDonald and H. R. Johnson as auditing committee, to whom the above reports were handed by the Secretary.

The relief of Mrs. Lind and family was then made the order of business and this committee was called upon for its report. Dr. Ogden, chairman of this committee, responded, giving a verbal statement of what Dr. Forman and himself found upon a visit to the Lind home.

Dr. Reed then read a letter recently received from Mrs. Lind. The question of arranging to place Dr. Lind and his two daughters in suitable state institu-

tions and the association assuming the support of Mrs. Lind was discussed from all angles by Drs. Reed, Ogden, Bloss, McDonald and Anderson. Dr. McDonald made a motion, which was seconded by Anderson, that Dr. Ogden present his report in written form, recommending a concrete plan of action in the Lind case, which report, after being approved by the Council should be brought before the House of Delegates for authoritative action later in the session. This motion carried.

Council adjourned to meet at the call of the chairman.

MAY 21.

Council was called to order by Chairman Jeffers at 1:10 p. m. with Drs. Johnson, Linsz, Maxwell, Ogden, Forman, Jeffers, McDonald, Thompson, Reed, and Anderson responding to roll call.

Minutes of last meeting were read and approved.

Auditing Committee was asked for their report. Chairman McDonald responded with the following:

Clarksburg, W. Va., May 20, 1919.

The undersigned Auditing Committee certify that they have reviewed the report of Editor J. R. Bloss, have checked and audited his accounts, and finding them correct and recommend the approval of his report.

(Signed) H. R. JOHNSON.
J. E. MCDONALD, *Chr.*

The committee further recommended that Dr. Bloss be permitted to make his report at next session of the Association for the period of the whole of 1919, thus incorporating three months included in his present report so that the report of the Journal year would correspond with the calendar year.

Clarksburg, W. Va., May 20, 1919.

We, the undersigned Auditing Committee, find the statements and accounts of Treasurer H. G. Nicholson correct and that there now remains in the Medical Defense Fund $4,998.70, in the Indigent Fund $1,076.00, and in the General Fund $1,066.23.

Respectfully submitted,

(Signed) J. E. MCDONALD, *Chr.*
H. R. JOHNSON.

The report of the Auditing Committee was approved as read, including all recommendations, and committee discharged with thanks.

The report of the Lind Committee was then requested. Dr. Ogden, chairman, submitted the following:

Your committee appointed to report on the G. D. Lind family, beg to give the following and do herewith make these recommendations:

In as much as Mrs. Lind is almost beyond the point of supporting herself, to say nothing of her three helpless charges, we recommend that immediate steps be taken by which the two imbecile girls be committed to the charge of the state and placed in one of the state institutions, preferably the Huntington State Hospital, Huntington, W. Va.

And that further, this Association relieve Mrs. Lind of the present indebtedness against her property, amounting approximately to $300.00, and in addition thereto, pay the premiums, in full, on Dr. Lind's insurance policy, which amounts to about $100.00. Also that the Association pay from its treasury, or by contributions from its members, the sum of $100.00 per year to Mrs. Lind for the support of Dr. Lind.

Appended find a statement of the indebtedness of Mrs. Lind:

Greenwood, W. Va., April 1, 1919.

Mrs. G. D. Lind, Dr.,
To M. C. Young,

To note dated May 5, 1919	$100.00
To interest @ 6%	35.50
To note dated October 2, 1916	83.00
To interest	12.45

To note dated March 2, 1917	25.00
To interest	3.12
To book account in store	29.92
	$288.99

Respectfully submitted,

C. R. OGDEN, *Chr.*
L. H. FORMAN.

This report was approved and authorized to be presented to the House of Delegates for further action. The committee thanked and continued.

The Council then took up the subject of financing the investigation of the Difference and Inequality of Fees paid to Physicians by the Workman's Compensation Commissioner, which was referred to them by the House of Delegates. After some informal discussion the following resolution was offered by Dr. McDonald. The resolution was adopted by the Council as their recommendation to the House of Delegates:

Be It Resolved; That the Council of the West Virginia State Medical Association recommend to the House of Delegates, that the settlement of grievances against the Commissioner of Workman's Compensation be referred to the present committee on Workman's Compensation and that they be instructed to prepare a list of such facts as may show discrepancies in the fees paid for the same work in the past, and present them through an attorney or otherwise to said commissioner, asking for a definite ruling as to the amount of fees for certain work, and when these fees are to be paid and when not.

Further, that said rulings shall be published in *The Journal* for distribution.

And further, that the expenses of the above procedure by said committee shall not exceed fifty dollars, one-half of which is hereby appropriated out of such funds of the Association as are available, and that they must look for payment of the other half to the State Hospital Association, with whose Workman's Compensation Committee they are hereby instructed to co-operate.

Council then adjourned to meet at the call of the chairman.

MAY 22.

The Council was called to order by Chairman Jeffers at 1:00 p. m. Minutes of last meeting were read and approved as read.

Dr. J. R. Bloss was re-elected Editor of *The Journal* for the ensuing year and his salary fixed at the same figure as last year.

The salaries of the Secretary and the Treasurer for the coming year were authorized to be the same as last year.

Council adjourned.

MAY 22.

The newly-elected Council convened at 2:00 p. m. for the purpose of electing officers for the coming year.

Dr. G. D. Jeffers was elected Chairman of the Council.

Councillors H. P. Linsz, C. R. Ogden and C. G. Morgan were elected as Committee on Medical Defense.

Council adjourned.

FIFTY-SECOND ANNUAL SESSION OF WEST VIRGINIA STATE MEDICAL ASSOCIATION

Clarksburg, May 20-22, 1919.

The Fifty-second Annual Session of the West Virginia State Medical Association is now history and in every way has proved a credit to the organization.

The opening session was called to order in the American dining room of The Waldo Hotel, Clarksburg, W. Va., on Tuesday morning at 10:15 o'clock, by President Robert J. Reed.

Rev. E. B. Turner, D. D., of Clarksburg, invoked the Divine blessing on the deliberations of the assemblage.

Hon. Judge James Robinson then extended a most hearty welcome to the association on behalf of Harrison county and the City of Clarksburg. He paid tribute to the medical profession, pointing out its vital relation to the economy of life—"for they usher us into being and usher our spirits on their eternal flight." He referred to the great progress being made by the profession comparing their work in the Civil war with their accomplishments in the World war. He then spoke eloquently setting forth the merits of the county and city on whose behalf he was extending a welcome. He stated that the immediate neighborhood was one of the oldest settlements west of the Allegheny Mountains. It was of historic distinction because it entertained the assembly of April 22, 1861, which resulted in the formation of West Virginia. It had furnished the only governor of Virginia ever elected from the part of Old Virginia which is now West Virginia. It was the birthplace of General Stonewall Jackson and is the birthplace of Hon. John W. Davis, present Embassador of the United States to England. He spoke of its versatility of industries and natural resources, declaring that it is the second county in wealth in the state and that its marvelous growth was largely due to its abundant and cheap fuel.

Dr. B. F. Shuttleworth, President of the Harrison County Medical Society, then extended a hearty welcome on behalf of that organization.

He alluded to the fact that J. M. Blackford, J. M. Ramsey and J. W. Bowcock, Clarksburg men, had signed the call for the first assemblage of this nature in West Virginia. He recalled the part the association has played in the formulation of the state laws and to the part the Harrison County contingency had played in maintaining harmony amongst medical men in the state. He declared we were doubly welcome because this was the semi-centennial of the first meeting of the association ever held in Clarksburg. He then fittingly touched upon the welcoming back of the boys who were returning to civil life after months of military service. He closed by again bidding us a wholehearted welcome and expressing the hope that this assemblage would be a most pleasant and successful one.

Dr. John L. Dickey, Wheeling, not being able to be present, President Reed called upon Secretary Anderson to respond to the welcome extended.

Dr. Anderson spoke as follows:

"Knowing full well the average physician's antipathy to a substitute for the 'real article' it is with considerable trepitude that I attempt to step into the shoes of Dr. Dickey, who, but for serious illness in his family, would have been here to respond to the welcome so ably extended to us as an association by Hon. James Robinson and President Shuttleworth, on behalf of Harrison County and the Harrison County Medical Society, respectively. Would that I possessed Dr. Dickey's command of language that I might fittingly. express the association's appreciation of the hearty words of welcome, with which we have been greeted, and becomingly acknowledge the magnificent hospitality extended to us by you.

"It is with great pleasure I can assure you, that The West Virginia State Medical Association celebrates its Fifty-second Annual Convention within the gates of your delightful city. For Clarksburg, teeming, as it does, with hustling industrial and professional life, surrounds us with an atmosphere, which

cannot help but act upon us as a stimulus and inspire us, individually and as an association, to play, even more enthusiatically in the future than we have in the past, the great part in the economy of life, which falls to the lots of our noble profession.

With victory perched upon our national banners, and the dove of peace hovering over our fair land, we as a profession, should renew our allegiance to the traditions and the noble principles of our profession and strive to ever keep pace with the world progress, which is advancing in great strides—yes, in leaps and bounds.

But why multiply words? Let us simply say we greatly appreciate your hearty welcome, and with hearts brim full to overflowing with good fellowship, we accept, with thanks, your hospitality.

The only tinge of sadness which has place in this joyous occasion, is the fact that Dr. S. M. Mason, through whom you extended your invitation to meet with you, is not here in person, but has passed since we last met as an association, to the great beyond.

Gentlemen of Harrison County and Harrison County Medical Society, on behalf of the West Virginia State Medical Association, I thank you."

A letter from the city water works was then read through which the members of the Association were invited to visit the Clarksburg filtration plant. The invitation was gratefully received and a vote of thanks tendered the officials of the water works.

Dr. H. E. Sloan then outlined the program of the committee on Arrangements and gave in detail the daily program arranged by the entertainment committee for the entertainment of the visiting ladies by the Ladies' Auxiliary Committee of Clarksburg.

Dr. T. Judd McBee not being present the Convention passed over his paper and adjourned until after lunch.

TUESDAY AFTERNOON, MAY 20.

President Reed called the General Scientific session to order at 1:45 o'clock. A number of the authors of papers being absent it was thought wise to combine the general session and the Surgical Section.

The first part of the afternoon was devoted to a symposium on Chest Conditions. The symposium was opened by an excellent paper by Dr. C. R. Woolwine, Davy, on "Pulmonary Tuberculosis." He pointed out the most prevalent ways by which infection was acquired and described in detail the best manner of examination in order to detect this infection. He advised a definite diagnosis and frankness in telling the patient the exact and entire findings. He spoke of the difficulty in handling a patient, the importance of the stomach, the dangers of reinfection, and the difference in method of treatment in different climates.

Dr. John W. Moore, Charleston, not being present, his paper on "Examination of the Chest for Tuberculosis" was passed over, and Dr. W. A. Quimby, Wheeling, gave an excellent talk, which he illustrated with lantern slides, on "The X-ray as a Diagnostic Aid in Chest Conditions." He in turn was followed by Dr. Arthur K. Hoge, Wheeling, who gave us some very valuable information with regards to the removal of foreign bodies from the lungs and bronchi in his paper on "Some Observations in Bronchoscopy and Oesophagoscopy." He illustrated his paper with lantern slides and a display of a complete set of instruments used in such cases.

In discussing Dr. Woolwine's paper, Dr. Clovis, Terra Alta, said: Infection of children with tuberculosis is not so

LIBRARY OF THE COLLEGE OF PHYSICIANS PHILADELPHIA

frequent by way of the lungs as by drinking infected milk and eating articles contaminated, such as apples, etc., which have rolled in the gutter or acquired filth elsewhere.

Dr. Arkin, Morgantown, said: Active tubercular germs are discharged by infected patients in same manner as typhoid bacilli and thus readily contaminate the water supply and thus spread the disease.

Dr. Woolwine closed the discussion by reporting a case of his knowledge wherein a whole family were infected with tuberculosis from drinking water contaminated from a tuberculosis sanitarium's sewer. He further stated that he thought a diagnosis of tuberculosis could be made from the presence of fine rales even before the X-ray would show anything of diagnostic significance.

In discussing Dr. Quimby's paper, Dr. Vest, Huntington, took exceptions to his statement with regards to the importance of a fixed diaphragm as significant of chest trouble, and cited a case of appendicitis in a child. In closing his discussion Dr. Quimby said that if the diaphragm were fixed and chest negative, there would be no chest significance, otherwise he thought there would be.

In discussing Dr. Hoge's paper, Dr. Wells, Huntington, objected to the statement that this work of removing foreign bodies from the bronchi was easy, he thought it most difficult. He also stated that the beard of grain was in itself poisonous and would cause an abscess apart from the irritation it would cause as a foreign body. He asked Dr. Hoge if he found it easier to remove a foreign body from the bronchi with or without tracheotomy.

Dr. Hoge in closing the discussion said it depended entirely upon the case. He admitted it was not always easy to get his instruments in the proper place, but that being done the rest of the procedure was comparatively easy.

Dr. Walter E. Vest, Huntington, then presented an able paper on the disease "Encephalitis Lethargica" of which the newspapers have had so much to say. His paper showed careful and painstaking observation and original investigation in connection with his handling of these cases while in military service. He stated that the lesions found were small hemorrhages in the nerves and nervous centers. The most prevalent symptoms were fever, lethargy, double vision or blurred images, vertigo, drooping eyelids, neuralgic pains, paralysis, lead pipe stiffness or rigidity of muscles, etc. It attacked all ages and sexes. The possibility of its following or being so closely identified with influenza may be accounted for by the frequency of hemorrhage in influenza. As to prognosis it is not always fatal. The treatment largely consists of rest in bed, scopalomin, and spinal puncture, the latter both for treatment and purposes of differential diagnosis from meningitis.

In discussion Dr. Arkin suggested that it may be due to a specific infection by a new germ. Dr. Vest in closing spoke of a post influenza cerebral inflammation, which was sort of a cross between influenza and meningitis. He accounted for the fact that it does not tend to follow all cases of influenza from the fact that there are so many different varieties of this disease.

The session was then turned over to the Surgical Section. Dr. Fulton, president of the section, not being present, his address was passed over and Dr. Ogden, Secretary of the Section, presided. The first paper was a masterly production by Dr. A. P. Butt, Davis, on "Joseph Price, Pioneer in Simplified

Surgery." He cleverly portrayed Dr. Price as one of the most unique and lasting figures in the annals of surgery.

The next two papers were "Inflammation of the Prostate," by Dr. H. G. Tonkin, Martinsburg, and "Prostotectomy," by Dr. T. K. Oates, Martinsburg. These furnished food for thought and brought out considerable discussion.

Next Dr. J. Ross Hunter, Huntington, presented a most timely and pithy paper on "Recurrence of Inguinal Hernia After Operation." He first called attention to the appalling number of recurrences. He then methodically sought the cause and pointed out remedial measures to greatly curtail the number of recurrences.

Dr. L. T. Harris, Parkersburg, then gave a paper on "Pleuritis, Suppurative, Surgical Treatment of." In this he presented a comparatively new method of drainage without resection of portions of ribs. He reported a number of cases treated after this method while in military service showing a remarkable percentage of cures and low mortality. He described the apparatus used and showed how it could be readily constructed of materials easily available.

The afternoon session then adjourned.

MAY 20.

In the absence of all the vice-presidents, Secretary Anderson called the evening session to order at 8:35 o'clock.

Dr. Robert J. Reed, President of the Association, was then introduced and delivered a most masterly address on "Our Obligations with Respect to the Public Health Problems of the Reconstruction Period." No summary of this production can do it justice. It must be read and re-read when it appears in *The Journal* to be fully appreciated and we recommend that it be studied by every member of the Association.

Dr. Anderson, after voicing the appreciation of the Association to President Reed for his most able production, appointed Drs. S. S. Wade, M. B. Williams, and J. Ross Hunter as the committee on the President's Address.

Dr. H. S. Mustard, Assistant Surgeon of the United States Public Health Service, Washington, D. C., was then introduced and gave a most able talk on the "Program of the Federal Government Relative to Public Health Questions." He said: The national program of the United States Public Health Service may be broad or narrow according to the amount of money appropriated by Congress with which to carry on its work. This service was founded in 1790 to prevent diseases from foreign lands, entering United States ports. It then consisted of quarantine stations and marine hospitals only, but has gradually expanded and now faces the big question of reconstruction. In reconstruction the greater number of cases are those of mental disability and of tubercular infection. The disabled men are not asking for charity, they simply want to be sufficiently restored to health to resume their former occupations.

Other phases of work in which they wish to help the nation, if they are given the money, are along the lines of securing vital statistics, report of communicable diseases, public health nursing, rural health sanitation, and control of venereal diseases. Rural health sanitation was shown to be a most important problem by the draft for the rejections from country districts exceeded those of the cities. In the country every man is his own health officer, hence he must be educated. The plan for handling this is for the national government to give $2,000.00, the state to give $2,000.00, and the county to give $2,000.00 and have a whole time county health officer at a $6,000.00 sal-

ary. This will take this officer out of politics and place him on the same basis as his neighbor in the adjoining county will cause good natured rivalry. The department things if the government can appropriate $3,000,000.00 for meat inspection it ought to appropriate $1,000,000.00 for rural sanitation.

Dr. Mustard sees a public health awakening ahead and bases it on the following factors:

1. The return of medical men from military service, where they have learned to think in terms of the health of groups of men instead of the individual only.
2. The return of enlisted men, trained to look after his neighbor and fellow as well as himself.
3. The lessons of the flu.
4. The awakening of patriotism.

Dividends is what we want from the health service. Ability to give service and to functionate properly is our aim.

At the suggestion of the presiding officer a unanimous vote of thanks was given Dr. Mustard for his coming to us and the message he brought.

As Dr. John G. Bowman, director of College of Surgeons, Chicago, had through some misunderstanding, a confliction of appointments, he was unable to be present and his talk on "Hospital Efficiency" had to be passed over.

The Association then adjourned until the following morning.

(*To be concluded in August issue.*)

MULTIPLE ABSCESS—SEQUEL OF INFLUENZA.

A CASE REPORT

By ROBERT M. LEWIS, Baltimore.

Although influenza, as a rule, runs its course without surgical complications, in any large series of cases resort to surgery is not infrequently necessary in the treatment of its complications and sequellae. Suppurative pleurisy is of course, the resultant condition most often requiring the surgeon's interference. Mastoiditis requiring drainage, is not exceedingly uncommon. The case here reported is the only one of its kind observed at the United States Naval Hospital, Newport, during the recent influenza epidemic. It is with the thought that its publication may interest others to describe similar cases that it is here submitted in brief.

The patient, a young seaman, was admitted with influenza to the United States Naval Hospital at Newport, R. I. Lobar pneumonia developed early, involving the base of the right lung. This ran a brief course, ending by crisis. At this time the patient's general condition was excellent. Two days after the crisis the temperature gradually rose irregularly from normal until five or six days later the chart was typical of sepsis. Exacerbations of fevers, sweats and chills followed in quick succession. The patient gave every evidence of toxemia—without however showing any satisfactory evidence of a localization of the infection.

Physical examination showed evidence of a delayed resolution of the consolidation at the right base posteriorly. Repeated blood counts showed a constant high leucocytosis—w.b.c. varied between twenty and forty thousand. Examination of the urine was repeatedly negative for pus—blood or other abnormal elements.

Nineteen days after the onset of the septic symptoms the patient complained of a severe pain in the right lumbar region and right iliac fossa. At this time the peak of the temperature was as high as 105°. High leucocytosis persisted.

Examination still showed the consolidation at the base of the right lung and also gave evidence of a small cavity at

this site. A skiagram suggested but did not prove the presence of a cavity.

The patient was seen with Dr. Manley F. Gates (captain M. C. U. S. N.) and Dr. F. A. Asserson (commander U. S. N), in consultation. It was agreed that an infected kidney was the probable source of trouble.

Before operating intense tenderness was found in the region of the kidney—but the right iliac fossa was also very tender. Rigidity of the right abdominal muscles was marked. Feeling that in spite of the absence of pus in the urine we had to deal with an infected right kidney, it was decided to expose that organ with a lumbar incision first; should the diagnosis then prove an error easy access could be had to the appendiceal region through the lower angle of the wound.

Ether anaesthesia was given. The retroperitoneal tissues were remarkably boggy and edematous. The region of the cecum, as felt through the peritoneum, appeared normal. One could say with certainty that there was no large collection of pus in its neighborhood.

The right kidney appeared somewhat larger than normal, and some difficulty was experienced by the author in freeing it at the upper pole. While separating the upper pole from the peri-renal tissues the finger of the operator penetrated the cortex, breaking into an abscess cavity which contained about half to one ounce of gray, grumous pus. The pus had a strong and disagreeable odor.

Free drainage was instituted and the incision partly closed, as no further foci of pus were discovered.

Slight improvement followed in the patient's condition but by the end of a week after operation it became evident that the sepsis had not been controlled. Death followed nine days after operation.

The autopsy, which was done by Dr. B. C. Willis, was most interesting.

About half the lower lobe of the right lung was solid. In this area a small cavity containing a wooden spicule as a foreign body was demonstrated. No history of its insufflation was obtainable.

The infected tract of the operation was noted but no further abscesses were found in either kidney.

The peritoneal cavity proved blameless until the spleen was brought out for inspection. This proved to be the seat of multiple abscess formation, the abscess cavities containing the same kind of malodorous gray pus that had been found in the kidney at operation.

It is interesting to note that there was never any left sided abdominal pain or other symptoms suggestive of splenic abscess.

The case serves too as a good illustration of the occasional difficulty encountered in distinguishing between acute right kidney infections and acute appendicitis. In such cases the posterior incision is ideal, controlling as it does both kidney and appendix. The remote cause of death here was evidently a latent pulmonary abscess caused by the presence of the wooden splinter.

Unfortunately the laboratory staff was overworked at the time, so no culture was taken.

State News

The news of the passing away of Mrs. Adele Jeliffe Hupp, wife of Dr. Frank LeMoyne Hupp, at her Fourteenth Street home at 2:30 o'clock, Monday, May 26, came as a severe shock to her friends in this city.

While she had been in ill health for the past two years, her sudden death was unexpected.

Mrs. Hupp was one of the founders of

the West Virginia Chapter of the Daughters of the Revolution and the regent of the society, and has been always active in its councils. She always took an active interest in musical Wheeling and was one of the founders of the Woman's Musical Club, whose delightful concerts of upward of ten years ago every lover of good music in this community will well remember.

Mrs. Hupp was identified with every activity of Dr. Atterbury's church of New York City before her marriage and had been a consistent member of the First Presbyterian Church of Wheeling. Her winning, quiet and well-directed discharge of charitable work will be greatly missed by many deserving people among whom she loved to work.

Mrs. Hupp is survived by her husband and one daughter, Miss Elizabeth Hazard Hupp. Her brother, the Rev. Raymond Jeliffe is pastor of the Madison Avenue Presbyterian Church of New York City.

Services will be held at 2:30 o'clock from the Hupp homestead, Fourteenth Street tomorrow afternoon, conducted by the Rev. Claude Porter Terry. Interment will be in Greenwood Cemetery.—*Wheeling News,* May 26, 1919.

Dr. S. L. Jepson of Charleston, State Commissioner of Health, was a recent visitor in Washington.

Dr. Boaz Cox, formerly of Morgantown, was found floating in the canal at Dijon, France, with a bullet hole through his head. He was murdered May 18.

Drs. H. K. Owens and A. M. Fredlock have returned to Elkins from the army and resumed the practice of medicine.

Dr. J. L. Lanich has returned from army service and is located at Coketon.

Dr. L. M. Davis, who has been located at Vanwood, W. Va., in the coal fields, has returned to his former practice at Elliston, Va.

Dr. J. T. Sharp of Charleston, has retired from practice. Dr. J. A. Arbuckle, formerly of Elkins, is now associated with Dr. V. T. Churchman in the former city.

Dr. T. Henry Becker of Bluefield, while attending the commencement exercises of Jefferson Medical College, in Philadelphia, died very suddenly on June 8. He left the hotel in the evening to take a walk. Half an hour later he returned in a taxicab seriously ill. He was rushed to the Jefferson Hospital where he died in a few hours.

Dr. H. B. Martin of Grayville, Ill., has located in Huntington; he is associated with Dr. E. S. Buffington.

Dr. F. LeMoyne Hupp of Wheeling, and Dr. C. R. Ogden, of Clarksburg, attended the A. M. A., which held its session in Atlantic City. They represented the State Association at the councils of the house of delegates.

Capt. J. W. Lyons, formerly of Huntington, has returned to West Virginia after having spent eight months in France in charge of the 111th Sanitary Train.

Dr. R. E. Vickers of Huntington has gone to Los Angeles, Cal., where he will spend the summer. He expects to return in September.

News of the death in France of Lieut. John K. Lawson, eldest son of Mr. and Mrs. J. A. Lawson of 326 Thirteenth Street, was received in Huntington from

the war department. The brief message stated that Lieut. Lawson passed away on May 28 from an attack of appendicitis.

Lieut. Lawson was a graduate of Gallipolis High School and later finished at Ohio State University, where he was granted a degree of M. D. Following his graduation he was appointed interne at the Miami Valley Hospital at Dayton. Shortly before his enlistment he opened offices at Dayton and was attaining a large degree of success when he answered the call to the colors.

He saw service with the Tenth Evacuation Hospital unit until the armistice was signed when he was transferred to a prisoner of war escort company.

Dr. Walter C. Swann, son of Dr. P. H. Swann, of Huntington, has returned from Evansville, Indiana, where he was stationed during the war; he will locate in his home town and be associated with his father. His engagement to Miss Annie E. Yates was recently announced.

Captains Guy Yost and Ray M. Bobbitt, both of Huntington, returned home June 15 from service overseas. Captain Bobbitt was overseas fifteen months and was with the twenty-third engineers. He will resume his medical practice in this city in the near future. Captain Yost was consulting surgeon of the sixth division, regular army.

Dr. Yost was overseas seven months. During his absence Mrs. Yost, who is also a physician, has taken care of his practice.

Dr. F. W. Barger, captain in the Medical Corps during the war, stationed at camp in Georgia, passed through Huntington recently enroute to his home in Hiawatha.

Capt. John Gibson has arrived in Huntington after two years' service in the Medical Corps. one of which was sent to France.

Dr. L. V. Guthrie, superintendent of the Huntington State Hospital, recently attended the meeting of the American Medico-Psychological Association in Atlantic City.

Medicine

MALARIA AND TRENCH FEVER

Gordon Ward (*Lancet*, April 12, 1919) says that the close resemblance between these two diseases is not generally recognized. When malaria is toned down by quinine rigors are uncommon and in trench fever they are not frequent, though in both a hot stage and a sweating stage are common. In malaria under the influence of quinine, undoubted relapses may occur without sporulation of the parasites in the peripheral blood, and it is possible that the unknown parasites of trench fever may behave in a similar way to those of malaria when influenced by quinine. Extreme pallor without marked anemia is characteristic of both diseases, the pallor being probably a vasomotor phenomenon. Both malaria and trench fever show a tendency to daily rises of fever at first. The hyperalgesia and pains of both diseases are located in almost the same regions and are probably due to disorders of the same internal organs, although the relative frequency of the three common areas of pain are different in the two diseases. The headaches and eye pains are much the same in the two diseases and vasomotor symptoms of the Raynaud type are recorded in both. It is known that relapses of malaria may occur for many years where there is no chance of reinfection and evidence indicates that the

same may be found true of trench fever. Differential diagnosis without laboratory aid rests upon the following points: In untreated malaria rigor is usual, while it is uncommon in trench fever. Quinine controls the temperature in most cases of malaria in temperate climates, but it has no effect on that of trench fever. A rash may occur in trench fever, while it is absent in malaria. Leg pains are more frequent in trench fever, but they may occur and be of equal intensity in malaria. Finally, in some cases of malaria there is general pigmentation which does not occur in trench fever. Both malaria and trench fever may be contracted in England and a patient who has suffered from one of them will not necessarily be able to distinguish between a relapse of the one and a fresh attack of the other.

METHYLENE BLUE IN THE TREATMENT OF INFLUENZA.

Blue (*Bulletin de l'Academie de medicine*, March 4, 1919) treated 250 influenza patients, including 185 hospital cases, with methylene blue. In about half the hospital cases there was pneumonia. By mouth the drug was given in cachets, pills, or gelatin capsules in doses of 0.2 gram for adults and 0.1 gram for children, four or five times a day. About eight per cent of the patients, especially those severely ill, showed a tendency to vomiting after taking the drug, but giving it with lactose in cachets seemed to reduce this difficulty. In the intestinal form of influenza with profuse diarrhea, the drug proved of marked assistance in arresting the diarrhea. Intramuscular injections of methylene blue proved painful, but by adding to 100 mils of a five per cent solution of the drug half a gram of quinine hydrochloride dissolved in a little water with 0.25 gram of urethane, a preparation sufficiently anesthetic in action was produced to permit of its intramuscular administration. The procedure of choice was found to be intravenous injection—one or two mils in twenty-four hours—of a five per cent sterilized solution. Administered in the initial stages of the disease this measure frequently aborted it. In severe cases with lung complications it often arrested the infection and was followed by rapid defervescence. Relapses and complications seldom occurred in cases in which methylene blue was used.

AUTOSERUM TREATMENT OF CHOREA.

Alan Brown, George E. Smith, and J. G. Phillips (*British Journal of Children's Diseases*, January-March, 1919) report the use of this method in twenty-three cases of chorea of which seventeen were mild and five severe. After one year and a half of observation seventy-seven per cent of the patients were cured, nineteen per cent improved, and only one patient unimproved, who refused further treatment on account of a severe reaction. The average number of injections given was three, but several patients were given only one, and one received five; the average amount of serum employed was seventeen c. c. Nineteen patients were cured in three weeks and four in one week. The authors sum up their results as follows: 1, The method has given infinitely better results than any other form of treatment; 2, the technic is so simple that it may be employed in any home or out patient department under mild anesthesia; 3, with the observance of proper precautions the reactions were negligible; 4, there were no recurrences in a period of one year and a half. The technic consisted in withdrawing about fifty c. c. of blood from the median basilic vein into three test tubes. After clot-

ting the tubes are put into the centrifuge for thirty to forty minutes, afer which time the serum is pipetted off and put into the incubator to keep at the proper temperature for injection. Twenty to twenty-five c. c. of cerebro-spinal fluid are withdrawn by lumbar puncture and the serum gradually introduced through a record syringe, taking care to avoid too great pressure. It was found that light anesthesia with ethyl chloride enabled the operator to estimate the resistance which is the guide to the quantity to be injected. The method is based upon the hypothesis that there are antibodies circulating in the blood which are inimical to the infecting organism of chorea and that these antibodies cannot come in contact with the organisms in the spinal canal on account of the choroid plexus. These antibodies are by this intraspinal method placed in contact with the bacteria.

TREATMENT OF GENERAL PARALYSIS.

Harry Campbell and Charles Ballance (*Lancet*, April 12, 1919) reported in 1914 the injection of salvarsanized serum into the lateral ventricle in three cases. The first of these patients, a violinist, is still alive and has returned to his occupation through he is a little less expert than he was before. Nevertheless his cure has been apparently complete, except for the fact destroyed cells could not be restored. This method of treatment was employed because it is well known that drugs introduced into the blood stream do not reach the parenchymatous tissues of the brain in effective concentrations, while drugs free in the subarachnoid space do bathe and penetrate deeply into the cerebral tissues. The best method of introducing large amounts of a drug into this space is by injection into the lateral ventricle. Cases of general paralysis are unfortunately not often diagnosed until there has been extensive damage to the cerebral cortex, whereas the greatest benefits from treatment can only be expected when it is carried out before such damage has been done. It is therefore necessary to make the diagnosis in the preclincial stages when possible. The Wassermann reaction is of the greatest assistance in this connection, for a positive reaction in the spinal fluid indicates that the central nervous system has been infected. In general paralysis both the blood and spinal fluid are almost invariably positive, and if the blood is negative the chances are almost 100 to one that the case is not one of general paralysis. In every case of syhilis if the blood remains positive after vigorous treatment with salvarsan and mercury the spinal fluid should be examined. If it is found positive spinal subarachnoid injections of salvarsanized serum should be pushed, and if the fluid still remains positive following that treatment it is probable that the cerebral parenchyma is infected and the case is potentially one of general paralysis. In such a case the salvarsanized serum should be injected into the lateral ventricle. It is further suggested that since the optic nerve carries sheaths from the dura, the pia and the arachnoid, the space beneath the latter communicating directly with the substance of the nerve, injection of this space should prove a valuable method of treating syphilitic lesions of the nerve. Whether the injection should be made by way of the lateral ventricle or directly into the subarachnoid space through the outer angle of the sphenoidal fissure remains to be determined.

Surgery

SEVERE SPRAINS OF THE KNEE JOINT.

Maynard C. Harding (*Journal of Orthopedic Surgery*, March, 1919) reviews seventy cases of severe acute sprain of the knee joint which were treated in the orthopedic wards at the Camp Lewis base hospital. Twenty cases which cleared up under simple treatment are not included in this list. In the cases reported all of the classical signs and symptoms of sprain were present: History of the accident, immediate disability, usually total, pain, prompt swelling, effusion, and tenderness over the torn capsule. The sprains were distributed as follows: General sprain, forty per cent; internal lateral ligament, forty-two per cent; internal semilunar cartilage, thirty-one per cent; external lateral ligament, one case; periosteal tear, internal condyle of the femur, two cases; and cracks of the patella, three cases. All had effusion. Sixty-five per cent were aspirated. Eighty-seven per cent of these had bloody fluid. Thirteen per cent had clear fluid. The average amount collected was 63 c. c. The X-ray findings showed three crack fractures of the patella. Three old dislocated semilunar cartilages were diagnosed and confirmed by operation. The conclusions arrived at as the most satisfactory method of treatment were: First, a careful diagnosis of the type of sprain; second, a prompt aspiration of any distended joint, since practically all the effusions were bloody and absorbed slowly. It was found in some instances that the effusion would remain for several weeks and tended to form thickened, chronic joints; third, prevention of distention of the capsule, as it was one of the main causes of weakened knee in after life; fourth, early baking and massage; fifth, strict supervision of the manner of returning to use.

TREATMENT OF HODGKIN'S DISEASE.

Curtis F. Burnam (*Surgery, Gynecology, and Obstetrics*, May, 1919) in discussing the treatment of Hodgkin's disease bases his observations on the results in over 100 cases which he had under his care in six years. The variations and rate of progress of the disease were pronounced and extended from a few weeks to a course of several years. The primary lesions appeared in the neck, mediastinum, abdomen or in all of these places. The diagnosis was made by the X-ray, blood and tissue examination in addition to the general physical examination. The most valuable of these for differentiating the disease from syphilis, metastatic tumors, and tuberculosis in the early stages was the examination of the tissues. Two glands were examined and it was found that this did not tend to spread the disease. The results of the blood examination were not so valuable. The greatest value of the X-ray was in the determination of mediastinal and chest involvement. The medicinal treatment was considered unsatisfactory. Forced arsenic medication was thought to hasten the spread of the disease. The treatment of greatest value was surgical removal of the glands supplemented by X-ray treatment. While the X-ray treatment, which has been used for the past twenty years, tends to ameliorate the condition, no authentic cures have been recorded.

In the treatment of this series of cases radium combined with rest in bed, forced feeding and iron in the form of Blaud's pills were employed. The results have been more satisfactory where the tissue examination showed lymphosarcoma than when Hodgkin's disease was demonstrat-

ed. The chronic cases reacted more favorably than the acute. In the chronic cases limited to one set of glands one exposure would often suffice for a cure. Heavy exposures in acute cases were usually followed by a marked glandular improvement but no corresponding improvement in the blood or the patient's general condition. In these cases rest in bed, fractional radiation and forced feeding were indicated. This method has been employed for eighteen months. Heavy work and exposure led to relapses. In chronic cases the disappearance of the gland masses almost invariably led to improvement in general health, gain in weight, disappearance of pruritis and the return of the blood to a normal appearance. Treatment must be planned so that adequate radiation will be applied to all parts of the body affected by the disease and great care must be taken to avoid injury of normal structures, particularly the skin. The guide to treatment is in the effect on the gland masses, the blood, the appetite, and the general health of the individual. No fixed plan of treatment is possible as a routine measure. The doses varied from several hundred milligrams to fifty gram hours in a single dose.

Propaganda for Reform

VALIDITY OF PROVISIONS CONCERNING "PATENT" MEDICINES

In the proceedings instituted by E. Fougera and Co., Inc., against the City of New York et al, the Court of Appeals of New York holds that the provision of the sanitary code is not unconstitutional in that it prescribed the formula disclosure of medicines. The purposes and effects of the code were well within the police power and had the object of protecting the public.. "No man has a constitutional right to keep secret the composition of substances which he sells to the public as articles of food" *State v. Aslesen*, 50 Minn. 5, 52 N. W. 220. If that is true of food, it is even more plainly true of drugs. But there was one objection to the ordinance, though one that amendment might correct: that the ordinance did not except existing stores of merchandise in the hands of dealers, in that the board of health exceeded the powers delegated to it..—*Jour. A. M. A.*, March 8, -1919, p. 753.

THE VICTORY OVER RABIES

Amid the victories on the European battlefield, we may pause to contemplate man's conquest of rabies. During the year 1916, 1,008 persons in the district of Lyons received the antirabic treatment. A single death in this list places the mortality at 0.099 per cent. Since 1900. more than 9,000 persons have received antirabic inoculations, with a total of nine deaths, or 0.09 per cent.—*Jour. A. M. A.*, March 15, 1919, p. 800.

NATURE'S REMEDY TABLETS

A H. Clark, of the A. M. A. Chemical Laboratory, reports that "Nature's Remedy" is claimed to contain ten ingredients; that the manufacturers declare seven of these—burdock, juniper, sarsaparilla, mandrake, rhubarb, dandelion and prickly ash; and that the manufacturers state they are "more proud" of the other three, but refrain from naming them for fear of imitators. Clark's analysis, supplemented by a microscopic examination by E. N. Gathercoal at the University of Illinois School of Pharmacy, indicated that the unnamed drugs are aloes (or a preparation of aloes), cascara bark and belladonna root. The microscopist stated that rhubarb, as well as all the other named drugs, if present at all are there in such small quantities

that no evidence of their presence was seen. As a result of the examination and a consideration of their powerful cathartic action, it is believed that Nature's Remedy is, essentially, aloes or aloin, cascara, and belladonna with, probably, resin of podophyllin (instead of mandrake)—a common cathartic mixture.—*Jour. A. M. A.*, March 15, 1919, p. 815.

MISBRANDED NOSTRUMS

A "Notice of Judgment" has been issued declaring the following nostrums misbranded: Chase's "Blood and Nerve Tablets," "Liver Tablets," and "Kidney Tablets," XXX Tonic Pills; Egiutcrro; Uicure; Sweet Rest for Children; Beaver Drops Comp.; Blood Kleen; Heart and Nerve Regulator; Kidneyleine; Eye Powder; Tanrue Herbs and Pills, and 5 Herbs.—*Jour. A. M. A.*, March 22, 1919, p. 883.

HAVEN'S WONDERFUL DISCOVERY.

The Council on Pharmacy and Chemistry reports that E. C. Havens, Sioux Falls, S. D., requested consideration of a remedy which he claims to have discovered for the cure of influenza. According to the label on a specimen, "This remedy is good for coughs, colds, lung diseases, lagrippe, influenza, rheumatism; good for pains, cramps, backache, lumbago, neuralgia; for severe pains soak your feet in hot water for three nights, add three tablespoons of baking soda in water and apply anti-flue medicine to the affected parts." The "discovery" was stated to contain oil of wintergreen, oil of sassafras, oil of black pepper, spirit of chloroform, tincture of arnica and alcohol, and was called Haven's Rheumatic Remedy before its supposed effect on "flu" was "discovered." The council finds that Haven's Wonderful Discovery is an unscientific, irrational mixture, marketed under therapeutic claims which are unwarranted and without foundation.—*Jour. A. M. A.*, March 22, 1919, p. 883.

NUTONE

This "nutritive tonic" is said to have the following complex composition: Cod liver oil, pure Norwegian, 25 per cent, malt extract, 9 1-3 per cent, beef juice, glycerine, hypophosphite lime, hypophosphite soda. chemically pure, 1½ grains each to the ounce, fluid extract nux vomica, 3-64 of a minim in each teaspoonful. It is advertised with claims that will lead thoughtless physicians and a confiding public to depend on it in cases in which fresh air, hygienic surroundings and nutritious food are prime importance. Adults are to take this preparation as a "nutritive" in doses which represent from three to twelve grains of sugar and eight to thirty minims of cod liver oil with unstated, but probably equally small amounts of beef juice. The Council on Pharmacy and Chemistry declared NuTone inadmissible to New and Non-official Remedies because it is an irrational, shotgun mixture advertised indirectly to the public with unwarranted therapeutic claims and a nondescriptive therapeutically suggestive name.—Reports of the Council on Pharmacy and Chemistry, 1917, p. 154.

MISBRANDED NOSTRUMS

The following preparations have been investigated by the federal authorities and their proprietors convicted of misbranding under the Federal Food and Drugs Act: Dr. Swan's Liver and Kidney Remedy, containing alcohol, sugar, glycerin, sodium salicylate, strychnine and some laxative plant drug, with indications of juniper. Stuart's Calcium

Wafers, containing strychnine, despite the claim that it contained no poisonous ingredient. Turpentine Man's or Tyding's Remedy, a glucose sirup containing potassium iodid, alcohol and traces of salicylic acid, phosphates, calcium and alkaloids. Henry's Red Gum Compound, containing heroin, chloroform, alcohol, glycerin and sugar. Athlophoros, a solution of glycerin, sodium salicylate, oil of cinnamon and water. Dr. Thatcher's Cholera Mixture, containing alcohol, morphin, a laxative drug, sugar and aromatics. Dr. Thatcher's Amber Injection, containing alcohol, opium and zinc sulphate to which acetic acid had been added. Abbott Bros. Rheumatic Remedy, containing 24 per cent alcohol with five grains potassium iodid to each teaspoonful with extracts of drugs such as sarsaparilla and dandelion.—*Jour. A. M. A.*, June 1, 1918, p. 1624.

ORCHIS EXTRACT

A postoffice fraud order has been issued against Fred A. Leach, doing business as the Packers Product Company, Chicago. The business which the postoffice has declared a fraud consisted in the sale of Orchis Extract, claimed to be a remedy for lost sexual powers, etc. The federal chemists found that Orchis Extract tablets consisted of milk sugar, orchitic animal tissue, and agents used in compressing the tablets.—*Jour. A. M. A.*, June 8, 1918, p. 1786.

CARE IN ADMINISTERING ARSPHENAMINE

More than the ordinary severe reactions from arsphenamine have been reported lately; hence there is need of special care at the present time in the administration of arsphenamine. The question may justly be raised if it is wise to repeat the administration at very short intervals. Therealso are indications to suggest the wisdom of beginning with small doses. Also, while heat may be used in dissolving the arsenobenzol brand of arsphenamine, it should be avoided in the case of other brands which are readily soluble in water.—*Jour. A. M. A.*, June 15, 1918, p. 1867.

COTARNIN HYDROCHLORID

P. J. Hanzlik reports that while the description of the actions and uses of cotarnin hydrochlorid given in New and Non-official Remedies tentatively accepts certain current statements in the absence of definite published data, experiments with animals carried out by him demonstrate that the drug is devoid of hemostatic action. He holds that cotarnin hydrochlorid is entirely worthless as a local hemostatic.—*Jour. A. M. A.*, June 15, 1918, p. 1883.

SEVERAL "MIXED" VACCINES NOT ADMITTED TO N. N. R.

The Council on Pharmacy and Chemistry publishes a report announcing the rejection of a number of "mixed" vaccines. In publishing its report the council explains its attitude toward this class of products: In view of the rapid development of bacterial therapy, the possibility for harm that attends the use of bacterial vaccines and the skepticism among experienced clinicians as to the value of vaccines representing a combination of organisms, the council has felt that it should scrutinize the claims for such agents with exceptional care and admit to New and Non-official Remedies only those vaccine mixtures for which there is acceptable evidence to indicate that the particular mixture is rational. Experienced clinicians have generally come to the conclusion that mixed vaccines have no specific action and that any

effect they may produce is due to a non-specific protein reaction. The preparations rejected in the accompanying reports are only a few of the many that are being sold by some biological houses. The report explains in detail the considerations which led to the rejection of the following preparations, all of which were considered because of inquiry received. 1. The Abbott Laboratories: M. Catarrhalis-Combined-Bacterin, B. Coli-Combined-Bacterin, Pertussis-Combined-Bacterin, Streptococcus-Rheumaticus-Combined-Bacterin and Streptococcus-Viridans-Combined-Bacterin. 2 Eli Lilly and Company: Catarrhal Vaccine Combined and Influenza Vaccine Combined. 3. H. K. Mulford Company: Influenza Sarobacterin Mixed. 4. G. H. Sherman: Sherman's Mixed Vaccine No. 40.—*Jour. A. M. A.*, June 22, 1918, p. 1967.

MICROCOCCUS NEOFORMANS VACCINE

This was admitted to New and Non-official Remedies in 1910, since at that time it gave some promise of therapeutic value. It has now been omitted because at the present time there is no evidence that the vaccine is of the slightest value and because its lack of value is demonstrated by the fact that during these years it has not made a recognized place for itself in therapeutics. The available information indicates that the micrococcus neoformans does not differ materially from ordinary skin cocci which are described in New and Non-official Remedies under staphylococcus vaccine.—Reports of the Council on Pharmacy and Chemistry, 1917, p. 152.

Book Reviews

THE OPERATION OF OBSTETRICS, EMBRACING THE SURGICAL PROCEDURE AND MANAGEMENT OF THE MORE SERIOUS COMPLICATIONS. By Frederick Elmer Leavitt, M. D., formerly Assistant Professor of Obstetrics and Gynecology, University of Minnesota; Obstetrician to the City and County Hospital, St. Paul, Minn. 248 illustrations, price $6. C. V. Mosby Co.

The first chapter of this book is given over to general preparation as to patient, instrument, and anaesthesia. The first surgical procedure considered is that of artificial interruption of pregnancy, the indications for which are considered under two general heads; conditions due to pregnancy itself and conditions due to concurrent affection. The author considers artificial interruption of pregnancy before the twenty-eighth week as induced abortion, after that time as induced premature birth. The various methods of cervical dilation and means to that end are fully described.

The operation for Caesarean section by the various methods is fully demonstrated by splendid illustration in connection with the text. Extra-Uterine pregnancy, its clinical aspect, diagnosis and treatment, are concisely dealt with. Both the practitioner and student will find much of interest and practical value in these pages.

QUARTERLY MEDICAL CLINICS. By Frank Smithies, M. D., Chicago, Ill. Published by the Medicine and Surgery Publishing Co., St. Louis, Mo. Vol. I, No. 1. Annual subscription $5. Single copies, $1.50.

The appearance of another quarterly giving a number of valuable demonstrations and lectures at a modest price by so able a man as Dr. Smithies will no doubt be met with a flattering reception by the profession at large. In this initial number will be found fifteen cases of practical interest.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER, } Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—No. 2. HUNTINGTON, W. VA., AUGUST, 1919. Subscription $1.50 per Year
Single Copies 20 Cents

REPORT OF FIFTY-SECOND SESSION

Clarksburg, May 21, 1919.

(*Continued from Page* 30 *of July Issue*)

The Association was called to order by President Reed at 9:10 a. m., and the general session and Surgical Section were again consolidated.

The programme was opened by a symposium on Influenza. Dr. Aaron Arkin, Morgantown, presented a most scholarly paper on "Clinical and Pathological Studies of Pandemic Influenza" which began with the historic passage from the Orient around the world, traveling over our country at the rate of 100 miles a day and leaving in its wake a death toll of 600,000 people. He pointed out the characteristic symptoms and stated that the prevailing type of infection or germ in any given community determined the type of complications. Further that the variation in the progress of the individual case depended upon the character of the secondary infecting germ. He dealt with the various combinations of germs and exceptional phases of the disease. To illustrate the various stages and types he presented for inspection a large number of very nicely prepared specimens. He was followed by Dr. S. D. Hatfield, Iaeger, who took up "Influenza Prophylaxis" in a manner which showed he had made a most careful clinical study of the something over a thousand cases he attended. He emphasized isolation, fresh air, the use of vaccines and eating of onions. In turn he was followed by Dr. C. H. Maxwell, Morgantown, whose subject "Damn the Flu Anyway" was taken from the remarks of a layman who discussed the situation with him during the epidemic. His paper was redolent with pithy observations and the hard commonsense of the keen clinician. In treatment he advised steering between the "hot air fiend and the cold air fool." He expressed his doubts about the disease being transmitted by a third party and being infectious after the third day. These papers called forth much discussion that was both interesting and profitable. Dr. Vest, Huntington, considered

it a droplett and personal contact disease, in which purulent bronchitis seemed to be the most predominating characteristic of cases brought to the post-mortem table. He called attention to the great frequency of hemorrhage in the organs and tissues of the body. He stated that in 787 cases of pneumonia complications not more than a dozen were of typical lobar type, and in 4590 cases observed by him only about fourteen showed predominating infection with the bacillus of influenza, hence the disease was something more than the mere infection of Bacillus of Pfeiffer. He considered the Tripple Lippo Vaccine as effective as the Typhoid Vaccine in the latter disease.

Dr. Arkin, in closing, spoke of a specific anaerobic organism discovered at Pasteur Institute in Paris, which weakened the capillaries of the blood vessels, causing hemorrhage and whose viris opened up the susceptibility of the body to other organisms, thus giving rise to the varied complications.

Dr. Hatfield, in closing, said he did not wish to wholly condemn the use of the mask, that it undoubtedly was of great value in institutional work, but he doubted its great efficiency in ordinary practice.

Dr. Harry M. Hall, Wheeling, then gave a most interesting and instructive paper on "The Practical Side of a Heart Murmur" in which he gave us the benefit of his experience obtained in examining hundreds of men for the service. He stated that the integrity of a heart dedended upon its ability to stand up to the duties placed upon it. Good heart muscle is of vastly more importance than the presence or absence of a murmur. Many good hearts may give forth a murmur. The great question in determining the integrity of a heart, is, does it supply the necessary blood to the organs and tissues. He called attention to the importance of the "short winded" test of the heart case, in which the improvement of this condition became apparent under proper conditions of rest.

In discussing this paper Dr. Bloss, Huntington, confirmed the non-value of a heart murmur in itself in determining the efficiency and endurance of the individual. Dr. Hatfield, Iaeger, called attention to the importance of the location of a murmur and its etiology in determining a prognosis. The aortic or diastolic murmur of syphilitic origin usually indicating a grave condition with promise of not over about two years of life, while a Mitral murmur of rheumatic origin warranted a very much more favorable prognosis. While Dr. Jepson, Charleston, stated that enforced rest in the case of a child with rheumatism often prevented a heart murmur as a sequel, and sounded a warning against permitting a patient taking digitalis to be up and around, insisting that they should be confined to bed.

The next paper was an able and scientific paper presented by Dr. C. W. Waddell, Fairmont, on "The Testing of Donors for Blood Transfusion" in which he clearly pointed out the great necessity of such tests and by illustrative diagrams and the exhibition of the necessary apparatus showed why and how these tests should be made.

Drs. J. R. Waddell, Wheeling, and H. A. Giltner, Parkersburg, being absent their papers were passed over and the Surgical Section of the Programme was entered upon. It might be said, in this connection, that Dr. Giltner's absence was due to the fact that he was called for active duty in the Navy.

The first paper of the Surgical Section was one on "Fractures" by W. W. Golden, Elkins, in which in his usual clear and masterly manner he pointed

out the most modern and best methods of handling traumatic surgery.

Dr. Noome, Wheeling, being absent, Dr. James Schwinn, Wheeling, presented an excellent paper on "Breast Tumors from the Standpoint of the Surgeon with Limited Equipment."

Both of these papers elicited much valuable discussion.

Dr. C. F. Hicks, Welch, being absent his paper was read by title and placed in the hands of Editor Bloss for publication.

The hour being late Dr. Scott's paper was deferred until the following day, and the association adjourned for lunch.

On Wednesday afternoon the General Session was called to order by President Reed at 2:15 o'clock. Dr. Charles W. Halterman, Clarksburg, being confined to bed with influenza was not able to deliver his oration in Medicine on "Neuro-Psychiatry in Military Service" and Dr. O. F. Covert, Moundsville, delivered his oration on surgery, entitled "Surgery of the Chest". After alluding to the changes wrought and progress stimulated by the war, he told of how this affected surgery of the chest. He stated that while formerly the surgeon refrained from opening the thoracic cavity, now its recesses were considered no more sacred than those of the abdomen. He first took up the heart, dwelling on the great value of the radioscope and fluoroscope in diagnosis and operation respectively. He stated that when radioscope showed a hemo-pericordium the location of a laceration was fixed and operation indicated, otherwise the injury was not considered dangerous and generally left alone. A cavitary foreign body was always removed. while a pariatal foreign body was left alone if smooth or removed if jagged or markedly irregular. He then turned to the consideration of injuries to the lungs, classifying them and indicating when and how to proceed with operation. He further touched on the surgical phases of treating diseases of the thoracic cavity. He told of the preference of formalin solution to that of Dakin's. He closed by citing his experiences with these cases while in the service.

Lieutenant-Colonel David Silver, Surgeon-General's Office, Washington, D. C., then presented a most practical paper on "Lessons from the War in Industrial Injuries of the Extremities." He urged first aid application of Thomas Splints to fractured limbs before transportation of injured and told that this had reduced mortality from 80 to 50 per cent in the British Army. He advocated, if seen within the first few hours, the removal of foreign material, the cutting away of devitalized tissue, and the primary suturing of gun shot wounds. If infected, the use of Carrel-Dakin solution, but emphasized the necessity of knowing how to use it in order to get good results. He urged the proper after treatment of the healed stump in amputations, by bandaging, massage, hydrotherapy, exercise, and the early application of temporary artificial limb, in order to hasten absorption to prevent formation of exostosis, to prepare stump tissues for function of weight bearing to guard against deformity, and to limit muscular atrophy.

Dr. Edward H. Richardson, Baltimore, then presented a paper on "The Significance of Pelvic Disorders in the General Diagnostic Study of Women." After putting his stamp of approval on Group Medicine and Surgery, he called attention to the effect of adherent prepuce and incarcerated clitoris and the remedy, circumcision; to the mechanical injuries at child birth, not of superficial structures, but of the stretching of ligaments, lacerations of cervix, stretching and tearing

of the deeper facia and levator muscles; to the conditions of the ovaries and its effect on the internal secretions; to abdominal bleeding from uterus—scoring the old saying that cancer of uterus does not occur before thirty years of age, and that excessive bleeding at time of menopause is to be expected; and to the possibility of T. B. and venereal foci of infection in the pelvis just as foci at roots of teeth.

He closed by insisting upon the prevalence, the scope, and the significance of pelvic disorders on the health of the individual.

Dr. Wingerter, Wheeling, being absent, Dr. B. Merrill Ricketts, Cincinnati, gave an excellent illustrated lecture on "The Urachus, Urinary Diverticula, and Uterus Acolis," which was much appreciated by all.

The Association then adjourned until 8:15 p. m.

The evening session was called to order by President Reed at 8:45 o'clock.

After a short address in which he explained the necessity of arousing feeling in West Virginia so that her influence may be brought to bear on Congress and the necessary appropriations may be made, to carry on the magnificent plan of the United States Public Health Service Department, President Reed introduced Dr. S. L. Jepson, State Health Commissioner, Charleston.

Dr. Jepson then gave an excellent address on "The Past and the Present of the State Health Department." He stated that in 1875 an effort to establish a State Health Department was made but that it failed. Later in 1881 a State Board of Health was established with a $1500 appropriation to finance the work. From this date till 1901 practically the only thing done was to license physicians, but this was in good hands for eighteen of the Health Commissioners have been Presidents of this Association.

During the years 1913-1915 $15,000 was appropriated and a whole time Health Commissioner was authorized. He was appointed to that office and started his tenury in Wheeling with an office force of two persons. In 1914 a State Laboratory was established at Morgantown under Dean Simpson and Dr. Arkin. In 1915 an appropriation of $25,000 was granted, laws granting more power were passed, a Public Health Council was authorized, which is composed of seven men, one from each congressional district, a Sanitary Engineer was authorized and appointed in 1916, and the residence of the Commissioner changed to Charleston. In 1918 the State Laboratory was moved to Charleston. In 1917 the appropriation was raised to $30,000. In 1919 it was again raised to $33,000 and $7,000 for Venereal Control Department with Dr. Farnsworth at its head. We have quarters of a suit of five rooms, three Sanitary Engineers—all graduates of technical schools, a personnel of fifteen, Divisions of Sanitary Engineering, of Preventable Diseases, of Vital Statistics, and of Public Health and Child Welfare. We have made a sanitary survey of Braxton County—it being the watershed for the City of Charleston. We have purchased models of school houses and factories. Through the aid of Governor Cornwell, we have secured a B. & O. car and have started our Health Movement, sending this car through the state in the interests of Child Welfare, etc. We now send an expert to investigate any local epidemic; we furnish free vaccines and expert advice; we issue a quarterly bulletin; we have a hygienic laboratory for the detection of T. B., Diphtheria, and Typhoid germs in specimens sent thereto; we assist in the installation of water works; we grant licenses to install

water supplies and sewage systems; we examine water on the railways of the state; and we protect people against fake doctors all at the cost of two and one-half per cent per capita.

Dr. Harriett Jones, Glendale, Executive Secretary of Anti-Tuberculosis League, was then introduced and read a paper on "The Tuberculosis Situation in West Virginia." She began by showing that the health conditions in the country were worse than in the cities. She stated that the Anti-Tuberculosis League was organized in 1908. In 1910 a T. B. Dispensary with a nurse in charge was established in Wheeling and in Charleston. In 1913 a State Sanitarium of sixteen beds was opened at Terra Alta. In 1916 a Modern Health Crusade was started. In 1917, Denmark, a sanitarium for colored patients, was opened, appropriation being secured through the legislature. In 1918 the Council of National Defense gave $10,000 for new buildings at Terra Alta. In 1919 the legislature provided $15,000 for a building for children. And now the plans for the future are: Two or more nurses for each county, lay field workers for child welfare; educational program of man and stereopticon to travel through the state; and an auto-campaign to boys and girls camps throughout the state.

Mrs. Jean T. Dillon, Director of State Division, Child Welfare, Charleston, was then introduced and presented a most excellent paper on "Child Welfare." She stated that visiting nursing and care of sick in the home was given its first impetus when in 1859 Florence Nightingale and Wm. Rathbone established the first public health nurses school in Liverpool, England. The fundamental principles of public health nursing are: 1. Only well trained nurses employed. 2. Necessities of life shall not be destributed. 3. No religious interference, but strengthen the chosen religious faith of the patient. 4. Observation of rules of professional etiquette towards doctors and organizations. 5. Co-operation the primary or basic aim. 6. Accurate records kept. 7. Free services when necessary and reasonable compensation from those able to pay. 8. Limited hours of work each day.

The program of the National Organization is: 1. Increase supply of nurses. 2. Extend opportunities for public health nursing education. 3. Training of assistants or attendants. 4. Encourage community programs. 5. Stimulate legislation. 6. Perpetuate the organization created during the war.

The next paper was by Dr. F. F. Farnsworth, Charleston, on "Venereal Disease Problem." He stated that out of the first draft there were 4500 West Virginia boys found to be infected with syphilis and 1500 with gonorrhea. It took the war to eradicate the old idea that a young man must sow his wild oats, and to establish the fact that a male prostitute is as bad as a female prostitute and should be treated the same way, and that the same principle that underlies the making of a good soldier underlies the making of a good citizen. Are you a law abiding citizen? Then help enforce the law. The government is doing all it can to help. The druggist is forbidden to sell gonorrheal remedies and syphilis cures. It is unlawful to advertise the same. Free treatment is provided, if necessary. Therefore do your bit.

Dr. M. B. Williams, Wheeling, presented an able paper on "Organization of Public Health Forces in Epidemic Emergencies." He first showed the helplessness of this country in the presence of the late epidemic. He recommended as a program of procedure in the future: 1. Break channels of infection. 2. Immunize by vaccines. Strength-

en the resistance of those exposed. This can only be properly done if you have whole time health officers, well enough paid, appointed for indefinite term of service, and outside the pale of political influence. Raise the position of Health Physician to the position of dignity that it deserves, and then you will have capable well trained men able to handle epidemics.

"The Medical Inspection of Schools" was then ably dealt with in a paper by Dr. Charles H. Keesor, Wheeling. He cited the birth of this movement fifteen years ago. He mentioned five agencies essential, but too often neglected: 1. School Hygiene. 2. Personal Hygiene. 3. Temperance. 4. Sex Hygiene. 5. Medical Inspection. He then gave the essential requirements in order to have or maintain proper school inspection: 1. Man of high type as inspector. 2. Ethical physician. 3. Sufficient compensation to attract men of the above standard.

This closed the regular program and Dr. C. O. Henry, Fairmont, presented the following resolution which was unanimously adopted:

Whereas, The term of office of Dr. S. L. Jepson as State Commissioner of Health expires in a short time.

And Whereas, His admission has been so meritorious and productive of such unprecedented advances in Public Health Matters in West Virginia,

Be It Resolved, That we, The West Virginia State Medical Association, in Fifty-second Annual Session assembled at Clarksburg, do herewith tender Dr. Jepson this formal expression of our appreciation of the work done by him in his capacity as Health Commissioner,

Be It Further Resolved, That the Asociation, believing the future of the State Health Department will best be served by his retention in this office, we respectfully pray, His Exellency, Governor Cornwell, that he consider favorably his reappointment,

Be It Further Resolved, That a copy of these resolutions be sent to Governor Cornwell.

The Association then adjourned till Thursday morning.

THURSDAY, MAY 22, 1919.

The General Session was convened by Pres. Reed at 10:30 a. m.

The first paper was by Dr. Charles M. Scott, Bluefield, on "Indications for and Operation of Vaginal Hysterectomy" in which he made a plea, careful and experienced judgment and rapid and skilful work in these cases. The paper showed that it was the product of much careful observation and wide experience.

Dr. Charles A. L. Reed Cincinnati, was then introduced and gave a most scholarly production on "The Relations of Static Mesenteric Circulation to Pelvic and Constitutional State in Women" in which he clearly demonstrated that stasis, decomposition, and absorbtion of the products of this process played a much greater part in the various nervous conditions to which women fall heir than the average physician has any conception. He pointed out the weird relation of this condition to convulsions, eclampsia and epileptiform seizures.

The next speaker was introduced by Dr. Ogden, who referred in a most pleasing manner to the inspiration he had received from him while a student in Louisville. Dr. G. A. Hendon, Louisville, then responded with a most valuable paper on "Acute Intestinal Obstruction." He opened by stating that the mortality in such case was about 50 per cent, when it should be but 10 per cent. Therefore 40 per cent is charged to the medical and surgical fraternity. He cited three types or degrees of obstruction: Obturation, in which the fecal current is

blocked and the onset relatively mild, strangulstion in which the Vascular Current is blocked and the onset extremely violent, and enervation, in which the nerve current is blocked by sepsis and the onset depends upon the virulence of the infection or activity of the focus. He stated that paroxysmal abdominal pain accompained with nausea and continuous irresistable vomiting without diarrhea means obstruction. He attributed the high mortality, largely to loss of time and the administration of purgatives. Treatment depends on time elapsed since onest and whether inside or outside the abdominal cavity. When early seen or outside cavity, remove obstruction, restore by saline, and bowel will drain itself. But since death is due to toxin, in cases seen late, first drain bowel and then release obstruction and if patient is critical, wait and do a secondary operation. He suggested following the collapsed bowel to locate obstruction. The type of operation depends on condition and age of patient, and the location of lesion largely on age of patient. In after treatment he advises proctoclysis, Fowler's position, and early lavage; and condemns the use of purgatives.

After some interesting discussion of this paper the Association adjourned until afternoon.

The Association reconvening at 1:45 p. m. President Reed called upon Dr. L. D. Norris, Fairmont, who responded on "Approved Modern Methods of Anesthesia," in which, after describing various types of anesthesia suggested these fundamental rules: 1. Anesthetic must be suited to the type of patient and character of operation. 2. The introduction must be made as pleasant as possible. 3. The amount must be varied with the surgical needs. 4. The transition must both to and from narcosis been even and gradual.

Dr. Oscar B. Beer, Buckhannon, then presented a paper on "Electricity in Gynecology," in which he made a plea for the more frequent use of this type of treatment by physicians. He advocated skillful use and that the necessary skill could only be obtained by study and practice.

Dr. Reed then introduced Dr. Alexius McGlannan, Baltimore, who delivered a most excellent address on "The Failure of Restricted Operations in Cancer of the Breast." Having operated on 92 cases within the last fourteen years and having most carefully and unbiasedly followed these cases up he talked with a degree of authority possessed by few operators. After describing in full what he considered a radical operation for the removal of the cancerous breast and after cautioning the operator with regards to the management of the skin flap so that the patient may have functional use of the arm, he warns against the too enthusiastic claim of permanent cures, and he axiomatically states that the surgeon who first operates on a cancer settles the possibility of cure of the patient and that a thorough operation performed late in the disease offers a greater hope for cure than a restricted one done early.

In closing he stated that naked eye diagnosis is more reliable than frozen section examination, and condemns sectioning for analysis.

He uses secondary operation, from choice, only to remove ulcer.

Dr. A. T. Post, Clarksburg, then read a most interesting paper on "Rat Bite Fever." He gave a most interesting account of three cases he recently had diagnosed and treated. He showed it to be a specific disease caused by a germ of the spirochaete type—you might almost

call it Rat Syphilis. He called attention to the fact that the infected rat when it bit a person would hold on and would have to be killed to get it to let loose. He stated that the preparations of arsenic seemed to be the most effective treatment.

This paper was interestingly discussed by Dr. Arkin, who had treated some cases. He confirmed the fact that it was caused by a spirochaete specific organism and also the peculiar tendency of the rat to hold to the victim.

Dr. Tom O. Williams, Washington, then gave a most interesting talk on "The Management of Injuries of the Peripheral Nerves," in which he not only gave us a glimpse of the wonderful work that is being done in the restoration of crippled soldiers, but presented for inspection some most interesting photographs showing the patient in various stages of treatment. The burden of his message was that hysteria is very common among wounded soldiers as a result of their nerve racking experiences and that they need psychical as well as physical treatment. To properly do this you must: 1. Understand the case yourself. 2. You must grasp the mental attitude of the man. 3. You must size up the "make up" of the man. 4. You must get patient to know himself as you know him. 5. You must make the patient want to get well.

A unanimous vote of thanks was then extended to the Scientific Committee by the Association for the excellent program prepared.

After a few closing remarks by President Reed and a universal expression of appreciation of the participation of the guests in the various sessions, the Fifty-second Annual Meeting of the West Virginia State Medical Association adjourned sine die.

Thursday evening at 8:30 o'clock the Association assembled around the magnificently appointed and beautifully decorated festive board spread in the American Dining Room of the Waldo, as the guests of the Harrison County Medical Society. Tempted by such a profusion of viands and surrounded by the fragrance of cut flowers and the loveliness of America's pride—the ladies—the very atmosphere was permeated with a mirth and dignified hilariousness which fittingly brought to a most delightful close one of the most successful Annual Meetings in the history of the West Virginia State Medical Association. After due consideration had been shown the dainties, Dr. Anderson, acting as toastmaster, called upon President Reed, President-elect Johnson, Dr. G. A. Hendon, Louisville; Dr. Edward H. Richardson, Baltimore; Dr. Charles L. Reed, Cincinnati, and others, who in turn responded in keeping with the spirit of the occasion. The assemblage adjourned at 10:30 p. m., that some of the guests might make their trains, every one breathing a hearty appreciation of the unsurpassed hospitality of the Harrison County Medical Society.

J. H. ANDERSON, *Secy.*

THE VICTORY MEETING OF THE A. M. A.—MAINLY A REPORT OF THE SURGICAL AND GYNECOLOGICAL SECTIONS.

By W. W. GOLDEN, M.D., F.A.C.S.,
Elkins, W. Va.

The military aspect of the last meeting of the A. M. A. at Atlantic City was in part due to a goodly number of military topics on the scientific program, in part to the frequent use of military titles in introducing the speakers and in part to a sprinkling of the military uniform

among the members and guests. The program of every section contained a greater or smaller number of papers on some phase of military medicine. Naturally this predominated in the surgical section. Nearly all of these papers, however, contained something of interest in civil practice. The military titles sounded queerly in connection with many familiar names and certainly added nothing to the high standing of such men as Billings, the Mayos, Crile, et alia. They did, however, serve to direct attention to the fact that most of our leaders were with the colors regardless of personal sacrifice. This was inspiring. Nevertheless, it was pleasant to hear every now and then a speaker with the good old time title of doctor. There was a goodly number of foreign guests and they took an active part in the scientific proceedings. With one exception every allied nation was represented, including China. The exception referred to was Italy, which reminds me that the same was true at the meeting last year in Chicago, and, therefore, can not be attributed to the recent Fiume incident.

The program of the surgical section was rather short this year, and such familiar faces and voices as those of Finney, Deaver, Binney, etc., were missing. It was an agreeable surprise, however, to see and hear a goodly number of makers of surgery whom we missed at the last two meetings.

Bottomley, of Boston, very cleverly discharged his duties as chairman, and in his address gave an interesting review of what the war has done for surgery. A special address by Charles Mayo consisted of a plea for the establishment of a national department of health, the head of which is to be a member of the President's cabinet. This is an old subject to the profession, but Mayo brought to bear upon it a freshness of convincing arguments based upon personal observations made by him upon the present scattered health activities of the Federal Government, many of which are overlapping in their functions, causing inexcusable waste of energy and money.

There was little of a revolutionizing character brought forward at this section, notwithstanding the fact that during the progress of the war allusions were frequently made, especially in the lay newspapers of the country, to epoch-making discoveries and advances in surgery. The little there was may, however, prove very far-reaching. I refer to the report of Walter B. Cannon, of Boston, of his experiments on traumatic shock. These experiments he claimed proved that shock is not due to cerebral exhaustion brought about through the nerve paths by over-stimulation of peripheral nerve-endings produced by traumatism, but is due to the production of toxic elements in the traumatized tissue which are conveyed through the blood circulation. In traumatizing the thighs of animals the nerve supply of which had been previously severed shock ensued. But if under the same treatment the nerve supply was left intact, but the return blood supply blocked by ligation shock was not produced. Furthermore, if the ligation was temporary, there was no shock as long as the ligation was maintained, but appeared in a few minutes when the ligation was stopped. This announcement visibly startled the section, but was favorably received. The audience seemed to show little concern about the knock-out blow which this new theory administered to anoci-association and other attractive ideas and practices which were so laboriously built upon the old theory of shock. Crile was present. It was a pity that the section's five-minute

rule did not give him an opportunity to criticise Cannon's theory at greater length in his discussion of it. Crile raised three points in objection. First, he called attention to the fact that shock can be and often is produced by merely exposing the intestines to the air. Second, a recent report by certain two surgeons with their experience in two series of amputations of the lower extremities corroborated his belief that the nervous system is directly responsible for the causation of shock. The first series of amputations was done under ether as the general anesthetic and two out of every three died from shock. The second series was performed under low spinal anesthesia and their statistics were reversed, only one out of every three died from shock. Third, he feared that if the nervous system is lost sight of as a primary factor in the production of shock, surgeons may grow careless in the handling of tissues. It will be observed that neither of these points is much if any argument against the conclusions drawn by Cannon from his experiments. The mere prolonged exposure to air of such a delicate structure as intestinal peritoneum may amount to a traumatism equal in its effect to repeated blows of a hammer upon the thigh. The proof adduced from the two series of amputations is anything but conclusive. It is conceivable that the better results in the second series of cases in the hands of the same surgeons may have been due to a higher degree of dexterity acquired by that time, and one would want to know many details of the conditions and circumstances of the two series of cases besides the mere difference in the kind of anesthesia used. And why would surgeons be any less careful in the manipulation of tissues on the one theory than the other? It is traumatization in either event which is the first cause of shock and the lesson to the surgeon to be gentle is of equal force in either theory. I was not impressed that Crile himself felt satisfied with the strength of the defense that he put up of his position, and this, as I stated, perhaps due to lack of time. Anyway, he looked embarrassed.

Have you ever heard of debridement? Probably not, unless you have been in the Army and happened to be right in it, surgically speaking. While I have been doing, for years that which it stands for, I never heard this word before. It was let loose on the surgical section by Dean D. Lewis, of Chicago, in an excellent paper on the treatment of acute military and other severe wounds. Soon it seemed to me the whole atmosphere of the surgical section became surcharged with the word debridement, the last syllable of which is pronounced as *ment* in *ballottement* with the accent on the short *i*. It seemed to me I could hear its reverberations at the meetings of all the other sections upon which I happened to look in, and it soon appeared to me as the unvarying motif of all the numerous music bands on the piers and elsewhere, whether they played "Hindustan," "Over There" or what not. Begorra, (excuse my Irish) it seemed to me that the echoes of this word reached the ocean breakers and became their dominant note and that the tide itself ebbed and flowed to the reverberations of its nasal twang. Whether you like it or not debridement has come to stay. At first to be the distinguishing shibboleth of the up-to-date surgeon, and later a burden upon the dictionary which may some day take its revenge by branding it obsolete. You ask, what does debridement mean? I don't know whether I ought to tell you or not. It has cost me a trip to Atlantic City to get it and the tips to the dining room waiters amounted to a little fortune even though they were never large enough to

get a bow or thank you from those autocrats. However, here it goes. Debridement means excision, free but careful excision of all damaged tissues, soft and hard, which enables the surgeon frequently to obtain primary union, or at least to very much shorten the period of healing. That this procedure is of great value goes without saying and that it is highly desirable as a common practice during battle conditions with numerous casualties is obvious. But it is doubtful whether it is advisable to resort to it to the same extent in civil practice. For instance, the retention for awhile of loose pieces of bone long enough to furnish some osteoblasts for osteogenesis to fill a gap is often desirable even though the healing of the wound will be delayed thereby. It is not always possible to tell whether a damaged piece of tissue is beyond resuscitation and a trial of it as a flap in an amputation may sometimes save the sacrifice of several inches of an extremity or of a joint.

Babcock, of Philadelphia, utilizes the idea of debridement, although not under that name, in the treatment of chronic wounds resulting from compound fractures when they virtually have become chronic sinuses, and, as brought out by Cheutro of Buenos Aires, usually but mistakingly going under the name of chronic osteomyelitis. Babcock injects the sinus first with a saturated solution of zinc chloride (made by saturating hydrochloric acid with zinc) which completely disinfects all the infected surfaces. He then injects an alcoholic solution of methylene blue which penetrates somewhat into the walls of the sinuses and serves as a guide to and limitation of the tissues to be removed. He then proceeds with careful and thorough excision of the diseased surfaces, keeping a trifle to the outside of the blue colored tissue. The denudation or excision of the bone is done in such a way as to convert the tracts or sinuses into shallow grooves or cavities, thus enabling the soft tissue to fall in and eliminate all dead space, which, of course, is an old principle in bone surgery.

The discussion of peripheral nerve injuries was introduced by Frazier of Philadelphia. While he advanced no new principles, many details proved interesting. The fact, for instance, that a large nerve can be stretched considerably to overcome a gap. The nerve ends or rather their sheaths are first brought together when possible by posturing the extremity, as sometimes can be done by overflexing the joints, or in the case of the larger branches of the brachial by extremely adducting the arm in front of the chest and then producing slow extension or abduction. Occasionally a gap can be overcome by displacing the nerve and placing it in a new course, a procedure especially applicable to the musculo-spiral nerve.

A whole afternoon was taken up in the surgical section with a discussion of fractures. Blake of New York started the subject off with a description of the treatment, particularly of the humerus and femur, the main feature of which is the elimination of immobilization and substituting for it continuous extension and counter-extension with the extremity in suspension, so that the patient enjoys considerable freedom of movement without disturbing apposition. For this purpose Hodgen's splint or some modification of it is used, but only for support and to furnish counter-extension and not for immobilization. In the case of the femur a caliper or ice-tong device is made use of instead of the Steinman pin. A frame of some sort provided with pulleys is essential, and the weights slung over these pulleys which make extension and counter-extension are made to coun-

ter balance. A simple frame for this purpose has been introduced under the name of Balkan frame, which can be had from any instrument maker at a cost of about $16.00. The cumbersomeness of all this paraphernalia makes it probable that this method of treatment will not be met with general favor. As one speaker remarked, with this treatment one must become architect, carpenter and engineer as well as surgeon and could not expect to find time to treat more than one patient.

I was pleased to hear Groves of England, discuss the physiology of bone repair. Some of you may remember my paper on fractures at our recent meeting at Clarksburg, in which I discussed this subject, among other things, and emphasized the point that the peritoneum is not osteogenetic, its service to the bone being merely to aid in the blood supply. Groves laid great stress upon this point in his paper which I believe was the best delivered on that occasion.

It was a great delight to listen to Albee, of New York, the wizard of bone surgery. He and all the other speakers left no doubt in our minds that a bone graft actually continues to live and does not merely serve as a scaffolding.

Crile's paper on abdominal injuries reaffirmed the fact, best known to the older surgeons, that many cases of penetrating gunshot wounds of the abdomen, even when the intestines are perforated, may go on to recovery without operation, a fact which was of great importance on the battlefield where, because of the large numbers of patients and poor facilities for proper surgical technique, operative interference was out of the question.

The citrate method of blood transfusion received further endorsement from the energetic Bernheim, based upon his experience in France. Those who attended the New York meeting two years ago well remember Bernheim's excellent paper on this subject at that time, on the eve of his departure for France, and the lively discussion which ensued between him and the inventors of cunningly contrived syringes for direct transfusion. It is to be regretted that nothing has been brought forward to simplify the methods of testing the safety of the donor's blood, and skepticism has been thrown upon the reliability of the near-simple test of ascertaining the mutual hemolytic properties of donor and recipient immediately before proceeding with transfusion without the complicated processes of typing.

The meetings of the sections on obstetrics, gynecology and abdominal surgery were held in the same building where the meetings of the surgical section took place, and two of the sessions were so timed that members of the surgical section could attend them. John G. Clarke's report on the treatment of myoma uteri with radium was a highly welcome contribution. We have heard and read much on the subject before, but always with a feeling of uncertainty as to how much of the information was based upon fact and how much upon romance born of an excessive degree of enthusiasm for this new agency which so easily lends itself to the dramatic. Therefore, Clarke, a gynecologist of the first magnitude and justly highly esteemed for his levelheadedness and his Missourian disposition, though a resident of Philadelphia, very closely held the attention of the section. Based upon a careful study of the use of radium in 150 cases, he drew the conclusion that this agent is of unquestioned therapeutic value, provided that the tumor is no larger than a pregnancy of four months, and provided that there is no co-existing inflammatory pelvic condition. A quiescent inflammatory condition may become acute and serious un-

der radiation. Radium will almost invariably stop the hemorrhage incident to uterine fibroids. It may ultimately reduce the size of the tumor, but it is not claimed to cause its disappearance. The discussion indicated a general acceptance of Clarke's view that radium is of value in myoma uteri but that this value is limited to comparatively narrow indications and that operative procedures are still in order in most cases. Kelley was not there. He was to read a paper on radium treatment in carcinoma of the cervix and body of the uterus. From the abstract of his paper as printed on the program he was to take the position that radium treatment deserves first consideration in every case of cancer of the uterus. Incidentally to Dr. Clarke's paper this subject was extensively discussed and the concensus of opinion seemed to be that radium is worthless in the treatment of cancer of the uterus. That it will improve the local condition causing complete healing is a fact, but nevertheless, the patient dies all the same from metastasis and apparently dies just as early as when not treated.

Emil Ries, of Chicago, reported several cases of alternating periodical swellings of the ovary. They may be present at one examination and absent at the next one a short while later, only to appear later on. A curious condition, and one well to bear in mind when we examine a woman and find no ovarian swelling, but who tells us that another gynecologist did find one sometime before. He did not want this to be confounded with the ordinary cyst of the corpus luteum. He wondered whether the rhythmic physiology of the ovary may not sometimes be the basis of rhythmic pathological conditions.

All who are doing pelvic surgery are familiar with the annoyance caused by the intestines crowding into the pelvis in spite of the Trendelenburg position as ordinarily used. Donald Guthrie in a short paper claimed that this can be avoided altogether or almost so by placing the patient in the Trendelenburg position *before* anesthetization is begun and this position maintained from that time on. This can be easily accomplished if the anesthetist is expert, but not otherwise.

Farr of Minneapolis, the inventor of an apparatus by means of which local anesthetics can be injected continuously as needed without stopping to refill syringes urged the greater use of local anesthesia, but more especially in abdominal surgery. In his hands local anesthesia not only suffices for a large number of abdominal operations, but combined with vertical retraction it enables him to make extensive explorations of the abdominal cavity through incisions of ordinary size. By proper posturing of the patient, he is often able to do away with gauze packing. In the discussion his apparatus was highly praised but the possibility of doing as much under local anesthesia as he is doing was not generally conceded.

Balfour, of the Mayo clinic, made a valuable contribution on the efficiency of surgical treatment in the bleeding type of gastric and duodenal ulcer based upon a careful study of a large number of cases, in some of which gastro--jejunostomy alone was performed and others in which in addition the ulcer received surgical treatment. His conclusions were in favor of treating the ulcer as well and this preferably by the cautery.

Horseley, of Richmond, detailed a new operation for duodenal and gastric ulcers, which makes gastro-jejunostomy unnecessary. He declared the latter operation for the treatment of ulcers of the duodenum and stomach to be as irrational as would be colostomy for the cure

of anal ulcer. He makes one incision about three inches long through the anterior wall of the duodenum and stomach through which he radically deals with the ulcer and then sews up the incision transversely, placing the angles of it in healthy tissue and temporarily putting out of commission the pyloric sphincter but leaving the physiologic function of the stomach intact. He used this operation in eleven cases with highly satisfactory results in nine. Two died, due, as he acknowledged, to faulty judgment and technique. The operation was favorably commented upon by some speakers, but William J. Mayo brusquely suggested that the author's claim should be substantiated by better statistical showing.

PRESIDENT'S ADDRESS TO THE WEST VIRGINIA HOSPITAL ASSOCIATION AT THE MEETING IN CLARKSBURG, MAY 19, 1919.

DR. J. A. GUTHRIE, Huntington, W. Va.

The nursing situation in West Virginia leaves much to be desired. With all respect to the many efficient nurses in the state it must be frankly admitted that a lage proportion, I might even say the majority of our graduate nurses possesses neither the personality nor the training that are essential. It is with the hope of remedying the existing conditions that I am making the following criticisms and offering the following suggestions:

There is a prescribed minimum of preliminary education for nurses in this state. This minimum is one year of high school or its equivalent. Better or more prelimiary education would be desirable but at present is impracticable. The rural communities of the state have not the high school facilitiies that are found in many states and though the opportunities for obtaining a good high school education are being increased rapidly, most of the young women who now apply for training have not had this advantage. Though we may not increase the requirements we can adhere strictly to present requirements and it is a laxity in this respect that has resulted in our training schools being filled with girls who have not the ability to master the subjects with which every nurse should be familiar.

There is undoubtedly a dearth of material for the training schools and this excuse is often advanced as a reason for taking girls who have not the minimum state requirements of preliminary education. The cause of this scarcity of material lies, to a great extent, in the training school itself. A young woman with good preliminary education, before she agrees to devote three years to a course of training, naturally demands that the training be adequate. There is little inducement to spend that much time in obtaining admission to a profession which contains so many individuals with poor training, and often poorer personality that the standard and respect of the prfession in the community is low. Let us now consider our training schools and what they have to offer a young woman as a preparation for her life work.

The attitude of many hospitals toward their training schools is deplorable since it lacks the elements of justice. Nurses are essential and the most economical means of obtaining nursing service is to have a training school. That the acceptance of such service obligates the hospital to give thorough and adequate instruction is often lost sight of. We see too many training schools where the policy is one of getting all the work you

can out of a nurse and giving her no more instruction than is absolutely necessary.

Class work is frequently subordinated to all other routine of the hospital. Frequently only one hour a week is devoted to an important subject which necessitates that subject being covered only in a very superficial manner. Preparation of lessons is not greatly urged, it being pointed out that after a long day's work the nurse is in no condition to study. Obviously this is true, but if we are to give adequate training the nurse must be given ample time for the preparation of lessons, for from the personal standpoint that is of more importance than a large part of her routine duties.

Then too, the teaching staff is often deficient. As a rule the teaching is done by busy practitioners who have not the time to devote to preparation of lectures and often on account of some important case are forced to be absent at the time which is devoted to class work. A lecture is missed and often never made up.

Practical nursing is usually taught by a woman known as the superintendent, who looks after the hospital, its management, financial and social, and possibly has charge of the operating room. It may be that she came from a neighboring town with meager hospital education. She gives the student nurse instructions in making beds and possibly later teaches her how to douche and cauterize. From then on the student copies from the older nurses or by practice is able to get on with her work.

Under such conditions it is only natural that discipline is lax. There is little to develop a sense of loyalty, of "esprit de corps" on the part of the student nurse. She feels that she is under no obligations and at the slightest provocation, real or imaginary, she leaves the training school and goes to another hospital. She knows from the experience of older nurses that the neighboring hospital will receive her with open arms, give her credit for what time she has been in training and keep her until she decides to move on to a third institution. Many of our graduate nurses have had training in several hospitals before they finally got their diplomas. And while this practice of changing from one hospital to another results largely from restiveness on the part of the nurse, the neglect of the training school is to a certain extent responsible.

Many of the infringements of discipline by pupil nurses may be traced to the influence of graduate nurses working in other hospitals. The graduate nurse may by maintaining an ethical, dignified and ladylike manner be of inestimable help in the training of pupil nurses. On the other hand, if she be of a type that is frequently found, a gossipy newscarrier, boosting her favorite doctor and hospital to the detriment of others, she is a bad influence and the source of much trouble.

It is a regrettable fact, but nevertheless a fact which we must recognize, that the deportment of many doctors in a hospital is not conducive of good discipline on the part of the nurses. On the visiting staff of almost every institution is at least one man whose conduct in the hospital is such as he would not dare use in the home of a refined patient. Questionable stories frequently are the means of this man's obnoxiousness. The nurse is not in a position to remonstrate and must frequently submit to such conversations as no young lady should be forced to tolerate.

Criticism of existing conditions seems to be the spirit of the times, but I do not advocate that Bolshevik methods be applied to our training school system. Neither am I such a devout follower of

Senator Borah that I would discountenance all changes from the present system.

Certain changes must be made if our training schools are to progress. Changes often of a radical nature, must be made if some of the defects previously pointed out are to be remedied. It is with the purpose of improving some of these conditions that I am offering the following suggestions:

Well organized propaganda directed particularly toward the high school students should be productive of more and better material for the training school. This propaganda should be directed by a central organization (The Hospital Association for instance) and be conducted throughout the entire state. Ample literature of the nature of tracts should be distributed and advertisements placed in the school papers. Talks to the young ladies by representatives of the Association might help many in the choice of a life work.

Adherence to the preliminary educational requirements is of fundamental importance. A higher entrance requirement insures better material for the training school and will result in a higher standard of nursing. A higher standard will attract a better class of young women and greater numbers. It will take time to see the results, but a higher standard will surely bring results.

Probably the greatest field for improvement lies in the training school itself.

Better instruction should be provided. Full time instruction should be obtained if possible. Where several hospitals are located in the same city an arrangement by which the classes are merged would probably save time and effort and result in better class work. More time should be devoted to class work and ample opportunity provided for study. This will usually necessitate a shortening of the nurses hours on duty.

An eight hour day for nurses offers the solution to the problem of time for study. Under the present system of twelve hour duty with hours and an afternoon off once a week there is always difficulty in arranging the off duty hours to suit the individual nurse. Most of the girls want their off duty in the afternoon and there is a shortage of nurses in the wards at this time. An eight hour schedule with no off duty would avoid this and give the nurses sufficient time for class work and preparation.

Concerted action on the part of all hospitals is necessary to stop the practice of changing hospitals to avoid disciplinary measures. I am not prepared to state that I would advocate training schools refusing admission to all individuals who have had previous training. Such a policy would in many cases do injustice. However, some general understanding on this subject is necessary if the present abominable custom is stopped.

Finally, I believe that a panacea may be found if we abandon our lethargic attitude toward the training schools. Elevate them to their proper place in the hospital organization and better results will be practically assured.

THE VENEREAL DISEASE PROBLEM.

DR. F. F. FARNSWORTH, Charleston, W. Va.

Read at Fifty-second Annual Meeting of West Virginia Medical Association, Clarksburg, May, 1919.

The social evil is a very ancient one. It is deeply intrenched in modern society. It has many aspects and its roots

extend into economic, recreative, social and criminal phases of society.

It must be attacked from many angles. It must be viewed in all its bearings; the subject has its legislative, educational and physiologic aspects.

In every community there are different attitudes of mind in reference to it. Many believe public prostitution a necessity; many believe the evil so deeply intrenched that it cannot be overcome, and some believe the vicious only are involved, while others recognize the dangers which also beset virtue.

All will admit that with the single exception of self-preservation, the sex instinct is the most powerful instinct of human life. All progressive forms of life are built upon the attraction of sex. Like a golden thread it runs through the warp and woof of every human existence. It determines human character, and destiny. It has filled pages of history with stirring deeds of valor, has created masterpieces of literature, music and art, and has touched every aspect of human life and experience. The exercise of these functions is the deepest responsibility of the race and their proper use is a God-like power—that of the creation of another human being in His own image.

But that which is capable of the highest uses is also capable of the lowest abuses, and thus we find that the worshipper of Venus often becomes the patient of Hippocrates and the inherent power to propagate and continue the race may become the avenue of its greatest danger, and we are compelled to resolve the voluntary social issue into that of the legal problem of Venereal Disease Control.

It is useless for me to tell a body of physicians that our recent draft examinations was a severe blow to our national pride. We thought we had the finest bunch of young Americans that ever marched beneath a flag—clean, moral, upright, and strong—but under the acid test of physical fitness to fight the efficiency of a beastly Hunnish culture, a large mass of them turned out to be a combination of tuberculars and hump-backed dyspeptics covered with venereal sores. Four hundred and fifty thousand of those examined for army service were found to carry evidence of specific infections and 178,000 were placed in isolation camps for treatment. Four thousand five hundred West Virginia boys were given intervenous injections for syphilis, and more than three times that number were found to have gonorrhea.

Thus, through a war emergency, was born a peace necessity: that of healing a nation of loathsome diseases which were causing more disability than all other infectious and contagious diseases combined. Other allied nations were confronted by the same problem and driven to prompt action, and America lost no time in starting measures for relief before the second draft would repeat the experience.

The attitude of the government after facts and figures were available was to handle the matter in a cold, scientific way. Twenty centuries of preaching has not converted the world; police force has had rough sledding when not backed by public opinion; education has been the torchbearer of progress in all ages and has never failed to win.

Therefore, the government has asserted the plain, scientific fact that gonorrhea, chancroid, and syphilis are infectious diseases, dangerous to the public health, thereby a menace to society, and must be controlled just as any other disease of like class.

It has sought the aid of the preacher and called in the police powers for support in its campaign of education and

control. All old fashioned notions about young men and their wild oats are proven false from first to last. The assumption that an aggressive fighting spirit and a tendency to dissipation must go hand in hand and that in order to develop brute vigor and nerve force sufficient to make a good soldier, a man must have a certain amount of moral latitude, are sophistries as base as they are misleading, and were only kept alive so long by army organizations which in time of peace could afford to cater to the selfish impulses of a low grade of morality.

We have in this war thrown overboard those superstitions. There are returning into civil life three million and more young men who, for months, have lived lives far cleaner and more regular than the average men of similar age in civil life. They have been members of an organization in which it was not manly to drink or dissipate; in which these things have been under the ban of popular disapproval, because it was proven to the men themselves that they interfered with fighting efficiency, which was the ideal of the soldier.

That the return of these men to their home communities is going to mean a more intelligent public opinion on these old, long-fought questions seems to me unmistakable. The boys of the next generation will grow up, most of them, with no knowledge of the saloon, and no experience with liquor. They will grow up in healthier and more wholesome communities, where the idea that vice cannot be suppressed but must be regulated merely, has been utterly exploded and discarded. So the number of men who come back with the imprint of dissipation upon them is going to be small, and for this we have in some degree to thank the bitter experience of war.

The government has paved the way for venereal control in the whole United States. It has placed an officer of the United States Public Health Service in every state for the purpose of co-operating with the different state boards of health and industrial concerns. It is establishing free clinics all over the country and is forcing prostitutes to give up their life of shame and giving them an opportunity to be cured of venereal ailments and enter some branch of respectable labor for self support. In this work we are informed that the government is not intending to act the part of the reformer, but is treating it as a cold scientific problem which must be met in the same way that other infectious diseases are met and its source eliminated as effectually as the mosquitoes of Cuba and Panama when found to carry yellow fever or such a war of extermination carried on as was waged against the rats that carried the Bubonic Plague to San Francisco.

The demobilization of 30,000 physicians and something like 3,000,000 men who have been educated and trained along these lines is bound to have far-reaching results throughout the United States. Every city, every hamlet, each community is bound to be more or less affected by the return to civil life and civil duties of these men who, for a space of time, have known the value of military discipline and military education. As soon as these men donned the uniform of the United States, they began to receive an education in matters of social hygiene.

They were taught the inexorable law that an unclean man—unclean physically or morally—cannot be a fit or an efficient man. The facts as to right living and right thinking, the almost unbelievable prevalence of venereal and other disease infections among immoral women, the baleful effect even upon children

yet unborn, all these facts have been made known to every man who is soon to return home.

More than this—the Army took them 20% effected, but will return them to civil life 99½% clean and non-infectious.

In a sense, each one of these returning physicians, officers and soldiers will be a missionary to his home community and by example as well as precept, will aid not only consciously but unconsciously in maintaining a higher standard of social conditions.

Society is not a structure of mechanical parts, it is a living thing composed of living members, and is becoming a more vital organism than ever before. It seems to me, therefore, that any effective co-operation or organization must depend upon organized society as well as organized medical service to disseminate information concerning the prevalence of these diseases.

The moral and social problem is, therefore, one which cannot be ignored, and enlightened opinion is rapidly getting behind the campaign against venereal disease; a campaign begun in war to insure military fitness for fighting men is just as necessary to insure the civil fitness and efficiency of men in operating railroads or digging coal.

The government campaign is being waged in every state in the Union. Pennsylvania is the only state in which the State Health Department has not availed itself of government aid and passed laws necessary to its enforcement. Thirteen states have bureaus operating under the direction of a commissioned officer of the United States Public Health Service. West Virginia is one of these states and your humble servant is the government representative, and however strong or weak the organization may be, it is plainly the duty of West Virginia physicians "to do their bit" in this fight against the greatest evil of all times, a fight which means as much as the subjugation of the Hun—the preservation of the manhood of today, the protection of the womanhood of tomorrow, and the children of the future.

A campaign which has been instituted by the Federal government, endorsed and taken up by our state, incorporated into our statute law, advertised far and wide by circulars, posters and newspapers, preached from the pulpits and taught in the public schools.

The question for us is—*what are we going to do about it?*

In a nut shell, our answer is this: A campaign of education in which people will learn what a few of us now know about the disastrous prevalence of these diseases. And in which society will be taught that an unmarried mother is a human being, and that a married mother, if she is to be a success, must have health and a sense of moral responsibility. A campaign in which men will be made to understand that neither God Almighty or the state recognizes a double standard of morals, and that a male prostitute should be ostracized just as completely as a female one. That illegitimate children no longer exist—they are wards of the state and given exceptional advantages, but the father of such a child is an illegitimate father and shares whatever disgrace may attach to it equally with the mother. This is a part of our creed, are you ready to subscribe to it?

This will lead to an epoch of law enforcement in which physicians and others are required to regard all venereal diseases as infectious and dangerous to the public health; and must be reported and controlled. Our law requires that now. Are you a law-abiding citizen? Are you honest physicians? If you are, you know the law and should be helping to enforce

it, but the fact exists that recently a physician from a small West Virginia town called the State Department of Health on the long distance telephone and begged help in controlling a suspected case of smallpox, frantically declaring that he could not afford to take chances of coming in contact with it because of his family and his other patients, while we had positive knowledge of 63 cases of gonorrhea and 13 cases of syphilis in infectious stages existing in that town and neither the physician nor the health officer seemed anxious about their families or their patients. It seems hard to harmonize such things.

It is plainly the moral as well as legal duty of the physician and the health officer to promptly report all cases of venereal diseases and take steps to control and, if necessary, isolate them. The laws of our state are very plain and the Public Health Council has declared its intention to enforce them.

Druggists are forbidden to prescribe for venereal diseases, or even sell or recommend remedies, and the last session of the West Virginia legislature enacted a law making it a misdemeanor to advertise nostrums or other drugs or means of cure. The object of these regulations is to force all who may find themselves infected to go to a reputable physician and place himself under treatment until cured.

Those who are financially unable to treat themselves are taken care of at one of our free clinics of which there are now nine operating in West Virginia, and there is no excuse for any one carrying the infections for want of necessary medical attention, and those who will not be treated voluntarily are being placed under quarantine and held so until rendered non-infectious. The restrictions governing this quarantine varies from the simple promise of the patient to observe all rules of sanitation to that of giving bond for re-appearance. Obstinate ones may have their houses placarded and even guarded, and already at least a dozen infectious cases have been held in jail in West Virginia, until given treatment enough to make them safe associates.

As West Virginia physicians, our duty is to co-operate to the fullest extent. Let there be no peace conference with disease, but mobilize our forces and fight it out to a finish. The newspapers will not print the casualty list. They may tell us how many blind Belgian children there are incident to the war, but never a word about the blind babies from gonorrhea. They may very properly give whole pages to detailing the viciousness of the Hun in order to stimulate subscriptions to the Liberty Loan, but we can expect little help from them as yet for even the public press has only been partially educated along these lines.

There is now organized not only a defensive campaign of cure, but a great health offensive of prevention by suppressing prostitution and promoting education reinforced by recreation. State by state, city by city, village by village, from Maine to California, a united front of citizens is being built up who will fight the war to a glorious finish. American public opinion is mobilized against the social diseases.

The medical profession is a vital part of the fighting force against them. Every victim, whether innocent or guilty, is a potential carrier of the poison to others. All means, therefore, must be used to extend free, prompt and scientific treatment to all who need it. A prompt cure, moreover, cuts off the disease in its infectious stages, saving others as well as the victim from the severe consequences of a relapse and the final stages.

In attacking our European enemy we

brought to bear every possible agency—airplanes, artillery, engineering, hospitals, gas, industry, shipping, propaganda, full man and woman power. We did not stop to argue about the comparative value of ammunition and hospitals. We needed both and used both. In this health war, too, we can not profitably stop to argue whether motion pictures or clinics or playgrounds or detention homes are the most effective means of reducing the venereal enemy. We must use all available means. It is an emergency. It is war.

Will West Virginia be equal to it and do her part?

Announcements and Communications

July 19, 1919.

Dr. James R. Bloss,
Ed. W. Va. Med. Jour.,
Huntington, W. Va.

My Dear Dr. Bloss:—

I recently attended the 75th annual meeting of the American Medico-Psychological Association held at Philadelphia, and while attending this meeting and serving as a member of the Committee on Nursing, I was deeply impressed with the seriousness of the shortage of nurses throughout the United States and Canada. Superintendents of hospitals from all sections of the country told our committee of the same condition, and one superintendent of a very large hospital in New York told me that he needed one hundred nurses to fill the vacancies in his hospital. It is also apparent that not only is there a great deficiency in the quantity, but the quality should also be improved. To bring about relief in this condition I have suggested through the Rotary Club of this city that a course in practical nursing and first aid be taught as a regular part of the regular curriculum during the last two years of the High School course. By doing this there will be many of our young women who will become seriously interested in the ennobling, useful, and lucrative profession of nursing among the class of women who have a desire or who are compelled to support themselves, while on the other hand the young women who are to become wives and mothers would be in better position to rear their families and also assist their neighbors in case of sickness or accident.

I believe that an hour each week devoted to this subject as above indicated will prove to be of inestimable value, not only to the pupil, but to the community at large. The Cabell County Medical Society endorsed this suggestion at their last meeting and a committee, with myself as chairman, with Doctors Yost and Vinson to meet and confer with the Board of Education at an early date. I am informed that Superintendent Wright of the city schools is favorably impressed and will co-operate with us.

The last serious epidemic or pandemic which prostrated this country was the influenza of last winter. This was sufficient to demonstrate to all thinking people that the practical course in nursing would be a valuable asset not only to the pupil receiving it, but to the entire community in which she lived.

Why not extend this movement to the entire state and ultimately to all progressive communities in the United States, and I know of no better organization to bring this to a successful issue than our State Medical Society.

Very truly yours,

L. V. GUTHRIE.

Chairman, Committee on Nursing, American Medico-Psychological Association.

NEGLECT TO REPORT INFECTIOUS DISEASES

Ed. W. Va. Med. Jour.,
Huntington, W. Va.

At the recent meeting of the American Medical Association, action was taken looking to the removal from membership in that body of practitioners who persist in failure to report communicable diseases as required by the state law. The following notice of this action is extracted from "Public Health Reports" issued by the United States Public Health Department. The resolution was introduced by Surgeon Lumsden in the section on preventive medicine, and I was very glad to support it in some remarks which gave a concrete example in which, by reason of the neglect to report cases of typhoid fever in one of our cities, over one hundred cases of typhoid fever occurred with twelve deaths. I hope that the action here reported may have a decided influence in bringing the physicians of West Virginia to a realization of their responsibility and to the danger which results to our citizens by reason of their neglect of duty. In the case referred to above, the typhoid outbreak was clearly traced to the water supply and to the fact that the local authorities had permitted the chlorinating apparatus introduced by this department to get out of order and so remain for weeks. This fact being detected by one of our engineers, the fault was at once corrected and the typhoid very quickly terminated.

Respectfully yours,
S. L. JEPSON,
State Health Commr.

Health administrators the country over have often complained of the failure of a certain proportion of the physicians practicing in their community to make prompt reports of cases of communicable diseases as required by law. Yet it is well recognized that nothing is more important in order that the health authorities may take proper steps adequately to safeguard the health of the rest of the community.

The American Medical Association has repeatedly placed itself on record as binding its members to support public health work, and it is gratifying to learn that at the recent meeting of this association at Atlantic City the following resolution was adopted by the section on Preventive Medicine and Public Health:

> *Resolved*, That the section on Preventive Medicine and Public Health of the American Medical Association recommended to the House of Delegates that it ask the constituent associations to consider the advisability of such amendments to their by-laws and to those of this association as will eliminate from membership any physician who wilfully fails or refuses to comply with local or state laws for the prevention of disease, including especially the provisions in such laws requiring he reporting of cases of communicable disease.

The enforcement of such an amendment to the by-laws as here proposed would be of incalculable value to the public health movement. It would make it possible to bring delinquent physicians before a court consisting entirely of their peers. This would make the American Medical Association insist that membership in the association depend on the faithful performance of the physician's duties not only to his patients, but to the public at large.

The association is to be congratulated on thus squarely accepting the responsibilities placed upon its members. Such co-operation is indeed appreciated by health administrators everywhere.

Mr. Secretary of Local or Component Societies.

Please forward promptly to your State Secretary all state dues received and avoid the complication of such letters as the following:

July 8, 1919.

"J. Howard Anderson,
Sec. W. Va. Med. Assn.
Marytown, W. Va.

Dear Doctor:

I shall be obliged to you for my 1919 membership card in the State Association. My dues were paid to our local secretary on May 6, but I have received no acknowledgment from you."

The writer of the above has not received any acknowledgment from the State Secretary because the State Secretary has not as yet received this man's state dues and cannot send membership card until he does.

Such letters as the above tend to cause misunderstandings and entail considerable correspondence, both of which could be avoided.

With kindest regards, I am,

J. HOWARD ANDERSON,
State Secy.

Sir:

When the Chamberlain-Kahn act created the Division of Venereal Diseases in the United States Public Health Service and the great work of venereal disease control was inaugurated, the plan of procedure formulated was grouped under three headings, as follows:

1. Medical measures.
2. Law-enforcement measures.
3. Educational measures.

The educational measures include the dissemination of information by leaflets, lectures, exhibits, moving pictures, stereopticon views, and other means, among industrial plants, commercial institutions, clubs, libraries, community centers, schools, churches, the home, and every walk of life.

The Law-Enforcement measures include encouragement of the closing of restricted districts; stimulating enforcement by state and municipal officials of laws and ordinance directed against prostitution in all its phases, the establishment and management of institutions for the rehabilitation of venerally infected persons and the commitment to institutions of venereally infected feeble-minded persons; urging the adoption and enforcement of laws and ordinances compelling the reporting of the venereal disease nostrums; and other measures designed to prevent the spread of the venereal diseases.

The Medical measures include the establishing of clinics; securing hospital facilities for venereally infected persons; making available laboratory facilities for the scientific diagnosis of venereal diseases; securing wide distribution of arsphenamine or similar products; obtaining the support of the entire medical profession by the reporting of their cases to the State Board of Health and the treating of venereally infected persons, in accordance with the best modern methods; securing the co-operation of drug-

gists in refusing to dispense venereal nostrums and directing prospective purchasers of such remedies to venereal disease clinics, or reputable physicians, securing the co-operation of dentists and nurses in their respective fields of practice; and enlisting the interest and services of all medical, dental, and pharmaceutical schools, societies, and journals.

Under Medical measures, the campaign was begun with the advertising media of the country. The 20,000 newspapers and magazines carrying advertising were appealed to for co-operation, with the result that up to the present, according to agreement cards received, and clippings made, approximately 140 only, or less than one per cent are still carrying obnoxious advertising. In other words, more than 99 per cent of the newspapers and magazines in the United States carrying advertising are co-operating.

The next step in the campaign was directed to the druggists of the country. Out of the 48,500 appealed to, results up to the present, by return agreement card, show the co-operation of approximately 28,000, or nearly 60 per cent.

After the druggists, the 131,780 legally recognized physicians in the United States were appealed to, with the result that agreement cards of co-operation have been received up to the present time from approximately 60,000, or nearly 50 per cent.

The campaign with the dental profession is just being launched; the campaign with the nursing profession and the training schools for nurses, is under way.

The campaign with the professional schools, hospitals, medical, dental and pharmaceutical societies and associations —national, interstate, state, county, and municipal—has just been begun by a letter addressed to the deans of the medical and allied colleges of the country. That letter, with the two attachments which accompanied it, is inclosed herewith for your information.

For your co-operation in bringing to the attention of the medical and allied professions of the country this campaign inaugurated in the medical and allied colleges of the country, for the extension of teachings on this subject, and the better qualifications of the physician, as a specialist in the treatment of venereal diseases, the United States Public Health Service respectfully requests that you publish the letter in your next issue; also, the "Report of a Conference with Medical Colleges Relative to Venereal Disease Control," and "Articles Relating to the New Status of Venereal Diseases in Medical Schools, etc.," which were attached to the letter.

If you cannot publish the "Report" and "Articles" in full, it is asked that you give as comprehensive an abridgement of them as possible. You may feel sure—it is even desired—that you give editorial notice to this article, and make such comments as you wish.

The Public Health Service thanks you for this co-operation, and confidently looks forward to your favorable action.

Respectfully,

RUPERT BLUE,
Surgeon General.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., August, 1919.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription . . . . . $1.50 per year
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—Robert J. Reed, Wheeling, W. Va.

FIRST VICE-PRESIDENT—J. Frank Fox, Bluefield, W. Va.

SECOND VICE-PRESIDENT—S. M. Mason (deceased), Clarksburg, W. Va.

THIRD VICE-PRESIDENT—C. M. Hawes, Huntington, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A. FOR 1918-1919—F. LeMoyne Hupp, Wheeling, W. Va.; Alternate—Henri P. Linz, Wheeling, W. Va.

DELEGATES TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg, W. Va.; Alternate—W. W. Golden, Elkins, W. Va.

COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; H. P. Linz, Wheeling, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; L. H. Forman, Buckhannon, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; J. E. Rader, Huntington, W. Va., two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, W. Va., one-year term; E. H. Thompson, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—H. L. Goodman, Charleston, W. Va., one-year term; Charles O'Grady, Charleston, W. Va., two-year term.

ATTENTION OF THE COUNTY SECRETARIES

In this issue appears a communication from Dr. Anderson in regard to the importance of prompt reports from the local societies of the payment of dues.

We can not, Dr. Anderson and myself, but call the attention of the membership to the fact that unless the payment of your dues is reported to the State Secretary promptly it will be necessary to drop the name from the mailing list of The Journal.

A complaint such as Dr. Anderson reports from one of the members means that he has to write to the secretary of the local society a letter of inquiry as to the standing of the member in question; a reply from him then has to be waited for and when it is received another communication must be sent to the Editor to put the member back on the mailing list. Just before the local secretary has replied to the letter from the State Secretary a letter has been sent by the irate member to "Editor West Virginia Medical Journal" beginning in about this way: "I want to know why you don't send me my Journal; my dues were paid about January first, and I have not had an issue since the first of April, etc., etc." In fact, blowing me up. A letter is writ-

ten to him that his name has not been reported to us as having paid his dues, also that we have written to inquire of Dr. Anderson in regard to the matter. About this time word comes from Marytown that said irate member is alright. He is put back on the list until next year, the procedure is gone through again.

This is not so overdrawn as you may think. The fact is, it is "gospel truth." The whole of our State Association depends upon the county secretary. There are no ifs and ands about it. Unless the man elected to this office in the local body is a wide-awake and hustling member the whole of our membership will suffer.

Make prompt and complete reports, please.

NURSING INSTRUCTION IN THE PUBLIC SCHOOLS

At the last meeting of the American Medico - psychological Association, a committee was appointed to study into the feasibility of getting courses introduced into the high schools throughout the country giving instruction in nursing and first-aid as a part of the regular curriculum.

Dr. L. V. Guthrie, superintendent of the Huntington State Hospital is appointed as chairman of this committee. In this issue of the Journal appears a communication from him dealing with this matter.

As stated by him, the Superintendent of Schools of Huntington rather favors some such plan, and a committee from the Cabell County Medical Society has been appointed to confer with the Board of Education and the Superintendent on the best way to proceed.

At the recent meeting of the West Virginia Hospital Association, in Clarksburg, the question of pupil nurses was discussed very freely and the difficulty of securing suitable applicants for entrance was very apparent. The hospitals of this city (Huntington) do have quite much trouble in inducing young women to take up the nursing profession.

It would seem that some such plan as is suggested should be an excellent one. The profession of nursing is certainly one of the most noble ones. Those practicing it should be women of exceptional mental attainments and ability. The very great responsibilities of the members of the profession should be understood and appreciated.

In the past it is feared that some good laundresses, saleswomen, etc., have been lost to make very mediocre nurses, just as a number of good farmers, mechanics, even ministers of the gospel have been lost sight of as physicians of indifferent ability.

If these courses of instruction do give training in the fundamentals of nursing as it will be met with in the home in everyday life, there will be sure to follow a larger per cent of the intelligent graduates determining to pursue this as a profession. They will realize that nursing is a profession calling for great skill and ability; that it is not an easy life will be understood as well as that the financial returns are good though no greater than is deserved for conscientious services performed. The results will not appear in the next year or the next, possibly, but in three or four years the average of the applicants for training schools should be greatly advanced from the standpoint of preliminary education.

It is to be hoped that satisfactory plans may be worked out and that some such course will be placed in the high schools.

VENEREAL DISEASE CONTROL

If the entry of the United States into the World War had done nothing else than to call to the attention of the people to the prevalence of venereal disease, a very great benefit would have been conferred upon society as a whole. The creation of the Bureau of Venereal Diseases in the Public Health Service has opened the battle for the control of this very grave menace to our public welfare. That success will ultimately be secured is a foregone conclusion. The only thing is to hasten its coming.

In the hands of our membership is placed the responsibility for great good in assisting in this campaign. If the rank and file will but lend willing hands, great results will be quickly secured; if we do not aid, the fight will be a long-draw-out one.

The plan of the Public Health Service is to proceed along the line of: 1. Medical measures. 2. Law enforcement measures. 3. Educational measures.

It seems that it would have been a good idea to have taken the third (Education) for the first step. Observation shows us that the first thing to secure in any great advance, such as is this, for the welfare of the human race, is to educate the people to its necessity.

Not so very long ago the question of the law-enforcement in relation to venereal disease came up in some correspondence with Dr. Farnsworth and he tells me that it is difficult to secure the cooperation of the police in these cases. If the public as a whole could only be shown the very great need for rigidly quarantining patients with venereal diseases, where they persistently and flagrantly break the health laws, it would be but a very short time until the authorities would be only too anxious to assist.

How this education is to be accomplished is a question. It would appear that much wider dissemination of information of the gravity of these diseases should be given in our schools. Competent teachers should give instruction to both sexes. These teachers should certainly be individuals of both tact and judgment; it is not an advisable thing for a lecturer to be sent to talk to seven and eight year old children and have an address which should be delivered to high school pupils. An occasional talk to a bible class will do good for the men or women there have sons and daughters or brothers and sisters to be reached. Not only that, but it is feared that possibly some of these members themselves may be more or less ignorant in regard to these matters.

Then again, we, as physicians, can do wonders in this line of education if we but will. I am sure that no physician in the West Virginia Medical Association would wish for the spread of one of these diseases to a single individual. This being true we should do all in our power to spread the gospel of the dangers.

Thank God, the "family doctors" are not all dead or breaking into the specialties. Here and there one is left who is the "family doctor" in all that that implies. The truth is that West Virginia is full of them. Let us not shirk our duty in this any more than in the other responsibilities which we have thrust upon us.

Let us all do everything in our power to help in this great crusade.

THE PRESIDENT-ELECT, SURGEON-GENERAL WM. C. BRAISTED

The election of Dr. Wm. C. Braisted, Surgeon-General of the Medical Department of the Navy, as President of the American Medical Association was par-

ticularly appropriate to the Victory Meeting. Thus the Association not only honors the man it elects but is itself honored. Dr. Braisted's career represents a steady progress through many delicate tasks and difficult assignments. He was born in Toledo, Ohio, in 1864, and was graduated by the University of Michigan in 1883, and by the medical department of Columbia University in 1886. He served as intern in Bellevue Hospital, New York, for two and one-half years, entering civilian practice in Detroit in 1888 and continuing until 1890, when he entered the Navy as assistant Surgeon. He was promoted in 1893 to past assistant surgeon, then to surgeon, and in 1913 to medical inspector. In the routine of a naval career he has served on a number of vessels and at many naval hospitals, and twice has been instructor in surgery in the naval medical school. In 1904 he fitted out and equipped the hospital ship *Relief*. During the Russo-Japanese War he went to Japan as the representative of the Medical Department of the United States Navy, and his report on this assignment was considered by the Japanese officials to be the most accurate and complete published. Surgeon-General Rixey appointed him assistant chief of the Bureau of Medicine and Surgery; he continued in this service for six years, from 1906 to 1912, serving also under Surgeon-General Stokes. During 1906 and 1907 he was attending physician at the White House. He acted as fleet surgeon of the Atlantic Fleet from 1912 to 1914, when he became Surgeon-General of the Navy with the rank of rear admiral. He has been decorated twice by foreign governments—first by the emperor of Japan and later by the president of Venezuela. Admiral Braisted is especially noted for the interest he has taken in preventive medicine. He has given particular attention to the control of venereal diseases. Under his administration the Department of Medicine of the Navy has made a most enviable record, as indicated by the remarkably low mortality and morbidity records of the men in the naval service. The election of Admiral Braisted at this time is especially fitting; it recognizes the service without whose aid the winning of the war would not have been possible.—*J. A. M. A.*, June 21, 1919.

THE VICTORY MEETING

From every point of view the annual session of the Association held at Atlantic City last week must be considered a success. The attendance far exceeded the expectations of the most optimistic; the registration was 4,929, exceeding by nearly 1,000 the registration of the largest previous Atlantic City session, held in 1914; in fact, the registration this year has been exceeded only by that of the Chicago and New York sessions.

An unusual feature was the new arrangement for section meetings by which each section holds only one meeting a day. This plan was carried out by all of the sections except one, and the House of Delagates directed that the plan be continued.

The special Victory Meetings on Wednesday and Thursday evenings and the war sessions held Thursday afternoon, devoted to general medicine and surgery, were a novelty of this session. The meetings were well attended, the foreign guests and distinguished representatives of American organizations were enthusiastically received and the programs were instructive. Reports of these meetings appear in this and in the next number of The Journal.

The sessions of the House of Delegates were unusual, especially because of the

sociologic-medical aspects of the questions discussed. Narcotic addiction, social insurance, physical education, pharmaceutical interests, the publication of new journals, anti-vivisection legislation, daylight saving and the securing of permanent benefit from the medical work of the war—these were some of the subjects which engaged the attention of the House and on which definite recommendations were made or action taken. These are reported in the published minutes of the House of Delegates.

Among other attractions the scientific and commercial exhibits were exceptional both in the quantity and character of the material presented. In the scientific exhibit special notice should be given to the demonstrations by the Army and Navy Medical Departments and the Public Health Service of work both during the war and in preparation for peace. Connected with the scientific exhibit was a continuous motion picture performance in which were shown many new educational films.—Ed. *A. M. A. J.*

Society Proceedings

Ed. Med. Journal.

Dear Doctor:—At your request I will try to give you a brief report of the meeting of the Barbour-Randolph-Tucker County Medical Society. which met at Philippi on the fifteenth. Hoping that when the report has passed through the hands of the typist and proof-reader, the readers may be able to discern what I am trying to write.

The meeting was held in the court house, the following being present: Drs. Butt, Miller, Moore, S. G. Perry, Golden, Murphy, Hoff, Smith, Isaac, Irons, Deets, Williams and Smith, W. S.

Dr. Golden presided. There being no special business to attend to, the reading of the minutes was dispensed with, and the program was promptly taken up.

Dr. J. L. Miller read a paper, "Achondroplasia; Effect on Menstruation. Report of Cases," which was very interesting and showed that Dr. Miller is very observing and painstaking in following his cases, and making a full and careful report on same.

Having secured Dr. Miller's paper for The Journal, I will attempt no definite report of it, but will specially call attention to the rarity of these cases and the danger of our overlooking the special character of the symptoms as they develop.

Dr. O. L. Perry read a paper, "Diabetes Mellitus, with Multiple Abscesses," reporting a case he has with many interesting features. I am sending his paper for The Journal, and call attention to it, as being of practical interest.

Dr. F. B. Murphy was to have a paper on "Practical Medicine," but instead gave a talk on this subject. Dr. Murphy is strongly in favor of physicians giving to each other, freely, anything they find good in our combatting disease. The concensus of opinion was that in general practice, we often fail in treatment, because of imperfect or casual examinations, and especially for lack of careful urinalysis. The good we may get out of medical societies along this line, was especially emphasized.

Dr. W. W. Golden read a very interesting paper, "The Victory Meeting of the A. M. A.," giving a very concise report of the physicians of note, and the number of them, and the papers read, with a synopsis of the discussions.

Dr. Butt, who attended the meeting, corroborated the report, adding some features that Dr. Golden had not mentioned. Dr. Golden has promised the paper for The Journal.

We then had the verbal reports of the delegates to the State Medical Association Meeting. Drs. Miller, Murphy and Moore; all agree that the meeting was most unusual as regards the men in attendance, the papers read, and the discussions, etc. We are all pleased to know of the advance our State Society is making both in quantity and quality. May she ever advance, keeping abreast with the times, and equal to every emergency.

The Society was honored by having with us on this occasion, Dr. Isaac Smith, who though long a member, has never attended a meeting of the Society before. He has been in practice longer than any member present, and longer, possibly, than any other member, except Dr. J. W. Bosworth of Philippi. Dr. Smith has quite an extensive practice in a fine grazing and agricultural section of the state, and seems to be physically and mentally equal to his arduous task.

We also had Dr. L. W. Deets, who is now located at Century, formerly at Richwood, Nicholas County. Dr. Deets was elected a member of the society and we believe he will be a valuable accession to our ranks.

The Society adjourned to meet at Thomas, at the regular October meeting. We all feel that this was one of our most interesting meetings, both from a social and a professional view.

At the close of the session, all went to the Geneva Hotel to a bountiful banquet, where twelve disciples of Aesculapius given by the Barbour County members, demonstrated their ability in bisecting the appetizing viands, to the abundant satisfaction of the waitresses.

We hereby extend an invitation to any of our brethren to be with us at our October meeting, where we always have a feast of reason, a view of lasting pleasure, and a supply of delicious viands to satisfy the taste of the most fastidious epicure.

J. C. IRONS, *Secy.*

State News

Dr. Joseph Lyons, who recently returned from overseas, and has been spending some time with his parents in Huntington, will locate in Marlington, where he will be associated with Dr. H. C. Solter in the management of the hospital at that place.

—o—

Dr. Chas. L. Moore, of Upper Tract, has returned from services abroad and resumed his practice.

—o—

Dr. J. O. Hicks of Huntington, who recently returned from overseas service, will go to San Antonio, Texas, to locate in the practice of medicine. He will be associated with his brother, Dr. W. D. Hicks, specialist in eye, ear, nose and throat work.

—o—

Dr. N. A. Haning of Wheeling spent some time in Huntington in July.

—o—

Dr. Chas. A. Reed of Cincinnati, Ohio, was a recent professional visitor in Huntington.

—o—

Drs. J. C. Mathews and R. M. Bobbitt of Huntington, have entered into partnership.

—o—

Dr. Walter C. Swann and Miss Annie Elizabeth Yates of Huntington were married Saturday, the 28th of June.

—o—

The following physicians from West Virginia attended the meeting of the A. M. A. held at Atlantic City in June:

C. T. Arnett, Clarksburg, E. S. Dupuy,

Beckley, J. A. Campbell, Wheeling, H. F. Coffman, Keyser, Mary J. Fortney, Hundred, E. E. Fankhauser, New Martinsville, Ivan Fawcett, Wheeling, C. S. Fortney, Hundred, M. V. Godby, Charleston, Wm. W. Golden, Elkins, Erland H. Hedrick, Beekly, Harry A. Henderson, Wheeling, C. S. Hoffman, Keyser, Emmett W. Horton, Bluefield, H. R. Johnson, Fairmont, T. F. Law, Jane Lews, D. C. Louchery, Clarksburg, Wm. A. McMillan, Charleston, F. E. Martin, New Martinsville, Roy Ben Miller, Parkersburg, George K. Nutting, Hinton, C. R. Ogden, Clarksburg, B. B. Ranson, Harpers Ferry, Robert J. Reed, Wheeling, J. Schwinn, Wheeling, Wilbur Fiske Shirkey, Charleston, O. M. Staats, Wheeling, Wm. W. Tompkins, Charleston, C. W. Waddell, Fairmont, H. Allen Whistler, Wallace, J. B. Winfield, Clarksburg, Jokum Humboldt, Beverly, U. L. Dearman, Reedy, W. S. Link, Parkersburg, C. L. Moore, Upper Tract, J. G. Rogers, Cairo, Wm. S. Shuttleworth, Aurora, M. E. Steinberg, Nitro, G. W. Wentz, Follansbee, H. Yokum, Beverly, A. P. Butt, Davis, Harry M. Campbell, Parkersburg, J. A. Campbell, Beckley, H. L. Goodman, McKendree, D. A. MacGregor, Wheeling, L. D. Norris, Fairmont, A. A. Shawkey, Charleston, J. M. Trach, Fairmont, H. V. Varner, Clarksburg Faulkhauser, New Martinsville, R. W. Fisher, Morgantown, J. A. Grier, Sistersville, Frank LeMoyne Hupp, Wheeling S. L. Jepson, Charleston, T. W. Moore, Huntington, Jas. Putney, Charleston, J. L. Pyle, Chester, H. H. Roberts, White Sulphur, C. F. Shafer, Grafton, G. L. Wyatt, White Sulphur Springs, F. F. Farnsworth, Charleston, Aaron Arkin, Morgantown, L. R. Harless, Glen Ferris, E. S. Goff, Spencer, H. E. Oesterling, Wheeling.

—o—

Dr. S. L. Cherry of Clarksburg, has been honorably discharged from the United States Army and has resumed his laboratory work in that city. Dr. Cherry's military record comprised a special course at Rockefeller Institute, New York Base Hospital Laboratory, Camp Pike, Ark., and Chief of Laboratory, Evacuation Hospital No. 24, August 1918 to May, 1919.

—o—

Dr. T. W. Moore of Huntington, has returned home after a very pleasant motor trip through Ohio and Michigan.

—o—

Dr. L. V. Guthrie, Superintendent of the Huntington State Hospital, was appointed chairman of the Committee on Nursing at the recent meeting of the American Medico-Psychological Association held at Philadelphia in June.

—o—

Capt. Harry W. Keatley, formerly of Huntington, has arrived in the United States after serving in France with the 113th Engineers. He will probably locate in Huntington for the practice of his profession.

—o—

Capt. Edward Shafer, who has been in France since last October, stationed at Base Hospital No. 103, until the armistice was signed, and then located at Dijon, France, has returned to Huntington.

—o—

Recent communications from Capt. Karl C. Prichard, medical corps, U. S. A., who is now at Brest, France, says that he will sail for this country in the next few weeks.

—o—

The West Virginia Association of Graduate Nurses held a meeting at Bluefield in June.

—o—

Capt. J. C. Schultz has returned to Huntington after two and one-half years

of service with the medical corps of the U. S. Army. He was stationed at General Hospital No. 10, Boston, and later made chief surgeon at the West Roxbury branch.

o——

Dr. T. Jud. McBee of Morgantown, is taking post-graduate work in Uriology at New York and Baltimore, dividing his time between the two places. Dr. McBee returned from overseas in February, after eighteen months of service. He was with the Royal Army medical corps for nine months in England, Ireland and Italy, and with the American Army nine Months in France, as a member of the staff of the New York post-graduate unit.

—o—

The State Board for Medical Examination held its session in Huntington, July 8th, lasting three days. Thirty-six men took this examination. Dr. S. L. Jepson, Charleston, State Health Commissioner, Secretary of the Board Dr. E. H. Thompson, Bluefield; Dr. J. L. Pyle, Chester; Dr. V. T. Churchman, Charleston; Dr. E. H. Gaynor, Parkersburg; Dr. W. T. Henshaw, Martinsburg; Dr. H. E. Sloan, Clarksburg, compose the examining board.

—o—

A list of the increased rates for services of graduate nurses recently adopted at a convention of the West Virginia Association of Graduate Nurses in Bluefield has been received in Huntington from Mrs. R. J. Bullard, R. N., Secretary-Treasurer, Martins Ferry, O., suburb of Wheeling. The scale of fees per week follows:

Ordinary cases, $30; each individual patient, $15; special duty in hospitals, $28 (hospitals to arrange the hours); obstetrical cases, in homes, $35; ordinary contagious cases, $35; smallpox cases, 50.

The fee for assisting in operations, including preparation of patient and all necessary cleaning up after operation, is $5. All traveling expenses incurred by the nurse outside the city are to be paid by the patient.

County associations have been abolished in West Virginia as the American Nurses' Association requires states to divide into districts. Two have been made in this state, with Wheeling the headquarters of District No. 1, and Charleston for District No. 2.

Mrs. Bullard advocates the conversion of county associations into county clubs, with a small fee, perhaps 25 cents, for any social affairs, such as entertaining nurses during the state board examination.

—o—

The opening of the new wing at the Chesapeake and Ohio Hospital, Huntington, was held July 1st, co-incident with the graduation exercises of the Nurses' Training School. Diplomas were conferred upon Misses Lois Foster, Pearl Droddy, Abbie Fowler, May Brammer, Mary Smith and Lillian Spencer. The address of the occasion was delivered by Rev. J. J. Cook. Dr. W. T. Oppenhimer, Chief Surgeon of the C. & O. Railway, delivered the diplomas. Dr. W. E. Vest, of the staff, presented the pins. Dr. R. J. Wilkinson, surgeon in charge, presided. After the graduation exercises the new building was opened to the audience for inspection. Among those present were Messrs. John B. Parrish, General Manager; E. L. Bock, General Superintendent; L. B. Allen, General Superintendent of Maintenance of Way, and other prominent C. & O. officials.

The new wing is well equipped with all modern hospital conveniences and gives an additional capacity of forty beds. Patients other than employes will be accepted for treatment.

Medicine

MEDICAL TREATMENT OF GASTRIC ULCER

Dr. Owen King, Aberdeen: The first and one of the most important things in the successful treatment of gastric ulcer is absolute rest in bed for a period of at least three weeks. This lessens the gastric secretions, thus promoting a more rapid emptying of the stomach. The action of hydrochloric acid on the raw surfaces causes a spasmodic action of the pylorus and hence inhibits the normal emptying of the stomach. The principle of medical treatment is to produce conditions in the stomach in which the stomach contents are neutral or alkaline in reaction in order to remove the irritation at the pylorus. When this condition is obtained and the stomach can empty in a normal period, nature will heal the ulcer if properly aided. Every case treated surgically should be followed by appropriate medical treatment in order to give the ulcer every opportunity to heal. I do not say that every case of peptic ulcer will respond to medical treatment. There are, no doubt, cases of marked pyloric obstruction from old scar tissue of healed ulcers, and these patients must have surgical treatment. There is an actual mortality of from 3.5 to 4 per cent in gastro-enterostomy under the best surgeons, and 10 per cent mortality with the average surgeon, while in the medical treatment there is practically no mortality.

INUNCTION OF CREOSOTE IN PNEUMONIA AND INFLUENZA

The axillary inunction of creosote in pneumonia and in influenza and some allied conditions is advocated by Wells. The method of administration is simple. For adults, 10 minims of pure creosote are gently rubbed into the right axilla with the finger. If necessary, which is very rarely the case, a second dose may be given, this time in the left axilla for fear of blistering. The patient must be dressed in woolen or flannel and placed between blankets so as to avoid a chill after the sweating. Only slight discomfort attends the treatment; a slight burning of the skin, which passes off in a day or two without vesication, is the only disagreeable effect. For children Wells has diluted the creosote with soap liniment, reducing the proportion of creosote according to the age of the patients. For infants, in place of the axillary inunction, he has at times substituted rubbing the neck and front of the chest with a liniment containing creosote. Practically all cases of influenza under his care have been treated by rest in bed (most of them a soldier's bed—that is, on the ground), plenty of fresh air, and the administration of creosote by the mouth. Half a minim of creosote shaken up with half an ounce of water is the simple mixture—the addition of half a minim of oil of peppermint makes it more palatable, but it is not very unpalatable without it. Very few patients treated in this way develop pneumonia. When signs of pneumonia developed the axillary inunction of creosote was nearly always followed by its abortion, or it was so modified that the patient recovered. When the pyrexia of influenza has gone, quinin or strychnin or both may be necessary.

In several cases of meningitis due to infection by *Micrococcus catarrhalis*, and and one by meningococcus, the patents recovered after axillary inunction. Wells believes creosote to be particularly detrimental to the pneumococcus, the *M. catarrhalis*, and the influenza germ, and that creosote administered by axillary inunction enters the blood stream through the lymphatics, and is taken direct to the

lung tissues by the pulmonary circulation, possibly taking a short cut into the blood stream by the lymphatic duct. Its diaphoretic action helps to relieve the hyperemia of the lung tissues, and thereby removes the nidus for the pneumococcus which might be formed by an exudate; its antiseptic action is brought to bear directly on any germs that may have gained access to the air spaces of the lungs.

THE TREATMENT OF SYPHILIS

Dr. Jay F. Schamberg, Philadelphia, at the annual meeting of the Pennsylvania State Society, spoke of three recognized drugs in the treatment of syphilis —arsphenamine, mercury, and iodides. Arsphenamine was generally recognized to be the remedy of paramount value. Its magical effect upon symptoms was due to the fact that it had a powerfully destructive effect upon the spirochaeta and that it could be administered in large dose. Arsphenamine is fifty times less toxic for experimental animals than mercury. Arsphenamine likewise has a roborant or tonic effect which mercury does not possess. The spirochaeta is vulnerable to arsphenamine and to mercury. The iodides do not appear to have any direct destructive influence upon the spirochaeta. In an attempt to eradicate every spirochaeta as early in the disease as possible, why should we not shoot with two arrows? I realize that Wechselman has warned against the use of mercury precedent to the use of arsphenamine, on the grounds that in his belief, most of the arsphenamine fatalties are due in large part to renal insufficiency, and that in the majority of cases it was mercury that damaged the kidneys. My belief is that the use of three inunctions of mercury per week is a valuable measure to associate with the use of arsphenamine, particularly in the primary and secondary stages of syphilis. No one is in an authoritative position today to state how long the treatment of syphilis should continue. Too often the physician will cease treatment after a single series of arsphenamine injections and perhaps a course of mercury, because the Wassermann reaction has become negative. Experience proves that such a course usually requires the later resumption of treatment with valuable time lost. While it is difficult to prescribe any routine formula, we may at least indicate an irreducible minimum of treatment. Before any patient with syphilis is discharged from observation, a diagnostic spinal puncture should be made.

ANTENATAL TREATMENT OF CONGENITAL SYPHILIS WITH SALVARSAN

Dr. Findlay, in the Glasgow, Scotland, *Medical Journal,* expresses his belief that antenatal treatment with salvarsan, reinforced by mercury, is superior to that with mercury alone. By this method not only is a larger proportion of the children healthy—various statistics record 100 per cent of healthy children—but it would seem that without further treatment the mother can continue to bear healthy children. It would seem advisable, in view of the above results, that all records of miscarriages and stillbirths should be kept, and those due to syphilis determined, when the syphilitic mothers could be treated with mercury and salvarsan, and the health of their future children almost certainly guaranteed.

Surgery

SURGICAL TREATMENT OF GASTRIC ULCER

Dr. R. L. Murdy, Aberdeen: Surgical treatment in the hands of a skillful surgeon gives less mortality than medical treatment. Timely surgical treatment will avert the fatal complications and prevent morbidity in a very large percentage of cases. Excision of the ulcer takes the operation out of the realm of simplicity and adds materially to the danger without securing sufficient compensating advantages to justify the measure. The occasional excision, particularly in deep infiltrated and chronic ulcers with a cancerous tendency and in some others, is desirable and urgent. The location of the ulcer, together with local and general conditions, will also, in a measure, determine the advisability of excision. Ulcers on the greater curvature of the stomach and near the pylorus that can be brought under the alkaline secretions of the duodenum show a greater tendency to heal spontaneously after gastro-enterostomy than those that cannot be alkalized. The observation of Dr. Charles H. Mayo, that gastro-enterostomy greatly lessens the acid of the stomach, and that cancer seldom occurs where the tissues are bathed in this alkaline secretion, can be put to practical use in this connection.—*J. A. M. A.*, 6-21-19.

The Carrel-Dakin treatment of wounds may be successfully employed in empyema, and presents a most valuable method.

The best results were obtained in acute cases, where costectomy was performed, and when a limiting membrane had formed, and an opening made sufficiently large to allow the introduction of from four to eight Carrel tubes.

The average acute cases can be sterilized in from six to ten days and the wound successfully closed by sutures or simply allowed to close spontaneously.

From the beginning there is a complete absence of odor, the pus disappearing very rapidly and the patient's general condition showing marked improvement.

The treatment of the delayed cases consisted of opening the pockets when possible, or enlarging the sinus sufficiently to introduce tubes, followed by the complete or partial sterilization of the cavity or old sinus with Dakin's solution, and finally the introduction of Beck's paste.

The treatment of the cases of large pneumothoraces consisted in sterilization of the cavities with Dakin's solution, and the subsequent sealing of the wounds. We feel that the first object to be attained is the sterilization of the cavity, considering that we have more to fear from the toxemia than from the pneumothorax. It is impossible to lay down any fixed rule of treatment that is applicable to all cases, but each must be considered a problem by itself and the treatment modified accordingly. which calls for considerable experience and skill on the part of the surgeon.

TRANSPLANTATION OF VERMIFORM APPENDIX INTO FEMALE BLADDER TO SUPPLY ABSENT URETHRA.

In this case Rosser made a free transplant of the appendix within a prepared tunnel extending from slightly within the neck of the bladder to a point near the clitoris where the normal meatus had been before its destruction. The urethra had been removed five years previously

for supposed malignant tumor. The operation planned and executed consisted of incisions through the mucosa, one below the clitoris, and the other at the bladder exit between which a tunnel behind the anterior vaginal vault was made with suitable forceps. The mucosa was dissected from the inside neck of the bladder for a distance of about three-fourths inch. Splitting the mucous membrane over the neck of the bladder longitudinally uncovered the remaining portion of its sphincter so that it could be narrowed. These preparatory steps taken, the patient's normal appendix was removed together with its mesentery and quickly placed in warm saline solution. While held immersed in this the tip was cut off, its lumen sterilized by the injection of 50 per cent alcohol, and a small sized catheter passed through it. The meso-appendix was then clipped and several linear incisions made through the peritoneal coat. So prepared, the catheter with the transplant was inserted through the tunnel well into the bladder, the distal end of the appendix entering the freshened bladder neck about one-half inch, where it was sutured as was the tunnel mouth to the bladder with fine catgut. The proximal end of the appendix projected a half inch out of the upper end of the tunnel. This made a meatus possible by splitting and sewing the flaps back on either side to a denuded surface. Care was taken to restore sphincter action by suturing such neglected fibers as could be found, and the juncture line was reinforced by pedunculated flaps dissected for that purpose. The patient left the hospital in ten days. The bladder behavior was normal, control being perfect, the capacity which had been greatly lessened by the five years of incontinence gradually expanded, and the transplanted appendix accustomed itself to its new surroundings, furnishing what promises to be a permanent and satisfactory urinary canal.

UMBILICAL HERNIA

Montoya discusses umbilical hernia in children, saying that it is more common than inguinal hernia but, owing to the tendency to a spontaneous cure, it seldom reaches the surgeon. He has operated in thirty-two cases in the last six years. He found in one cadaver that the intestines had formed a hernia into the cord at birth; in such a case the bowel should be reduced at once and the cord ligated. For ordinary umbilical hernia, after reducing the hernia, he straps two-thirds of the abdominal wall with adhesive plaster, first taking up a fold the entire thickness of the wall, with the umbilicus and hernia in the depths of the fold. The adhesive plaster holds the fold firm, allowing the ring a chance to heal. The plaster is renewed by the physician himself every week or two; the child can be bathed as usual in the interim. This method obviates any danger of stretching the ring, which is liable when a small pad is used. He adds that these mechanical measures have to be long kept up; a year is none too long, provided the ring and the hernia show no tendency to grow larger. With careless or negligent parents and when the hernia is exceptionally large, operative measures are preferable and he reviews the various technics available. He applied Mayo's method in eight cases, including one in which the girl of seven had a return of the hernia six months after it had been treated by merely resecting the ring and freshening the edges of the muscle. He never uses gneral anesthesia for it in young children; the operation is completed in about six minutes. He gave the older children a few whiffs of ethyl chlorid to supplement the local anesthetic.

TREATMENT OF CLUB FEET

As to the treatment of club feet, Allen says that he would not under any conditions ever touch a bone with any kind of a surgical instrument, nor would he make a skin incision longer than one-eighth of an inch, nor use a Thomas wrench. The treatment he employs consists of surgery and proper bracing. The adduction and pes cavus are first reduced by cutting the flexor brevis and fascia, if necessary, then forcibly shred or tear all other soft tissues resisting the extreme limits of normal abduction and planus positions. The second step is to cut obliquely the tendoachilles and then forcibly convert the equino-varus into a valgo-calcaneous position. If the surgery and manipulation have been thorough and complete, then the little finger will easily convert the adducto-cavo-varo-equinus into an extreme position of abducto-plana-valgo-calcaneus and then but little resistance will be encountered in retaining this position. The next step is the application of braces. There are two kinrs of braces, and two periods for using them. The first brace is the retention brace. It is used both day and night at the beginning, being removed for bathing and massage. The period of wearing braces varies. People between 35 and 60 years wear braces for an entire year. Younger patients wear them a shorter time. The retention brace is worn day and night until the foot shows no tendency to return to its original deformity, after being absolutely unbraced for a number of hours. When this point is reached, the walking brace may be employed during the day and the retention brace used only at night. The retention brace must hold the foot and femur about parallel. The tibia and femur should be so flexed on each other that the papliteal angle thus formed is considerably less than a right angle. The brace must also secure the exact counterparts of each of the original deformities. It is also important to understand that in order to produce ultimately a normal foot with normal ranges of movement that these extreme normal ranges must be secured during the process of correction. The time necessary for operation and application of the retention brace is usually ten or twelve minutes.—*Jour. A. M. A.*

REMOVAL OF FOREIGN BODIES IN KNEE JOINT

Dr. C. G. Cumston, in the *New York Medical Journal*, calls attention to the fact that the Belgian surgeons, Willems and Caestecker have treated five cases of movable foreign bodies, in wounded men, by arthrotomy and extraction of the body. This was followed immediately by the patient being allowed to walk about. This method was formerly advocated by Willems following the removal of fluid collections from the joints of the lower extremity. The technic is as follows. After the arthrotomy incision has been closed by three lines of suture, and the patient has recovered from the anesthesia, active movements of the knee joint are begun. This is accomplished by the patient executing a series of movements of flexion and extension of the greatest degree possible. The following day the patient walks about without the aid, and he gradually becomes accustomed to this so that within a few days he is able to walk in a normal fashion. The use of this method gives a rapid functional recovery, and for an end result the joint is perfectly normal and there is no subsequent muscular atrophy.

TWO SIGNS IN CHRONIC APPENDICITIS

Dr. Robert T. Morris of New York City, states that two signs belonging to the sympathetic and autonomic nervous systems were of prime importance in making a differential diagnosis between chronic appendicitis and other affections of the abdomen and pelvis. These two signs did not belong to acute appendicitis. As a result of the chronic irritation of the appendix, impulses were registered upon the second and third right sympathetic lumbar ganglia known as the fused ganglion in such a way that it became hyperesthetic. Deep pressure upon the abdomen about an inch and a half to the right of the navel and a trifle caudal brought out this hyperesthetic point which constituted one diagnostic sign of importance in differential diagnosis. The other sign consisted in permanent distension of the ascending colon. It was what he called the cider barrel sign. Percussion upon the normal left side of the abdomen brought out a note suggestive of the cider barrel in October and percussion over the right side of the distended ascending colon brought out a percussion note suggestive of a cider barrel in March. This chronic disturbance of the ascending colon was apparently caused by exhaustion of its sympathetic innervation due to chronic nagging from the irritated appendix.

Propaganda for Reform

During June the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-Official Remedies:

Robert McNeill: Chlorcosane (McNeill); Dichloramine-T (McNeill).

Lederle Antitoxin Laboratories: Pituitary Extract—Lederle; Ampules Pituitary Extract—Lederle, 0.5 c.c., 1 c.c.; Tuberculin "O.T." (Old Tuberculin); Tuberculin "B.E." (Bacillary Emulsion); Tuberculin "B.F" (Bouillon Filtrate); Antidysenteric Serum (Polyvalent); Streptococcus Vaccine (Polyvalent).

Collosol Preparations. The Council on Pharmacy and Chemistry reports that Collosol Argentum, Collosol Arsenicum, Collosol Cocain, Collosol Cuprum, Collosol Ferrum, Colloso Hydrargyrum, Collosol Iodin, Collosol Manganese, Collosol Quinin and Collosol Sulphur are inadmissible to New and Non-official Remedies because their composition is uncertain. In the few cases in which the therapeutic claims for these preparations were examined, the claims were found so improbable and exaggerated as to have necessitated the rejection of these products on this account. The term "Collosol" appears to be a group designation for what are claimed to be permanent colloidal solutions, marketed by the Anglo-French Drug Company, Ltd., London and New York. Were this claim correct, the Collosols should contain their active constituent in the form of microscopic or ultramicroscopic suspensions. The council was, however, obliged to question the colloidal character of the preparations. A number of samples submitted to the council had separated and Collosol Hydrargyrum was not a colloidal solution at all; also the ampules of Collosol Ferrum contained a flocculent precipitate. If either of these two preparations were injected intravenously as directed, death might result. —*Jour. A. M. A.*, June 7, 1919, p. 1694.)

Pulvoids Calcylates Compound. The Council on Pharmacy and Chemistry publishes a report on Pulvoids Calcylates Compound (The Drug Products

Co., Inc.), not so much because the preparation is of any great importance, but as a protest against the large number of similar irrational complex mixtures which are still offered to physicians. These "Pulvoids" are tablets, each of which is said to contain "Calcium and Strontium Disalicylate 5 grains, Resin Guaiac ½ grain, Digitalis ¼ grain, Colchium (Colchicum), Seed ¼ grain, Squill ¼ grain, Cascarin 1-16 grain, with aromatics." They were advertised among "approved remedies for la grippe and flu." The Council admits that salicylates have a field in influenza in that they often afford relief from pain. There is no reason to suppose that a mixture of strontium and calcium salicylate—the calcium and strontium disalicylate of the "Pulvoids" is probably a mixture of strontium and calcium salicylates—has any greater salicylic effect than an equal amount of sodium salicylate. On the other hand it is worse than useless to give colchicum, squill and digitalis for the relief of such pain. No educated physician will give resin of guaiac and "cascarin" in fixed proportions with salicylates. (*Jour. A. M. A.*, June 14, 1919, p. 1784.)

Antithyroid Preparations (Antithyroidin-Moebius and Thyreoidectin) Omitted from N. N. R. New and Non-Official Remedies, 1918, contained a discussion of "antithyroid" preparations and described two of these: Antithyroidin-Moebus (E. Merck, Darmstadt, Germany), and Thyreoidectin (Parke, Davis and Company, Detroit, Mich.) The "antithyroid" preparations have not realized the expectations of their promoters, and are viewed with skepticism by practically all critical clinicians. Consequently, notwithstanding the cautiously worded claims made for Thyreoidectin, the council voted to omit this preparation from New and Non-official Remedies (Antithyroidin-Moebus had already been omitted because it was off the market). (Reports Council Pharm. and Chem., 1918, p. 50.)

Book Reviews

A TREATISE ON CYSTOSCOPY AND URETROSCOPY, By Dr. George Luys, former Intern, Hospital of Paris; Former assistant in department of Urinary Disease at the Lariboisere Hospital; Laureate of the Faculty of the Academy with Additions by Abr. L. Wolbarst, M. D., New York; Cystoscopist, Beth Israel Hospital; Consulting Urologist, Central Islip and Manhattan State Hospital; Gento-Urinary Surgeon West Side Germana Dispensary and Hospital; Author of "Gonorrhea in the Male," Ect. With 217 Figures in the Text and 24 Chromotypegraphic plates out-side the text, including 76 drawings form original water colors. St. Louis, C. V. Mosby, 1918.

This is one of the most comprenshive books on this very interesting subject. It gives a condensed history of urethroscopy with almost two pages of references so that any one desiring to do so can have this subject in detail. The technique together with the applicants necessary in the examination of the uretha and the bladder is fully set out and the understanding of the subject considered greatly facilitated by illustrations and the frequent case histories which are added.

Catherization of the uretha with its tecnique, its indications, difficulties and accidents is fully taken up, making the book a reliable guide to the student and practitioner.

AN OUTLINE OF GENTIO-URINARY SURGERY, by George Gilbert Smith, M.D., F. A.C.S., Genito-urinary Surgeon to outpatients, Massachusetts General Hospital. 12 mo. of 301 pages with 71 illustrations. Philadelphia and London. W. B. Saunders Company, 1919. Cloth $2.75 net.

The author states in his foreword this little brechure was written with the idea of presenting to students and general practitioners the important point in the symptomatology and pathyology of genite-urinary diseases. The treatment so far as the minor surgery and medicinal measures are concerned is given with some measure of fullness in consonance with the author's own experience with his private cases.

The illustrations are numerous and well chosen. A bibliograph much to the value of the book.

THE BLIND: THEIR CONDITION AND THE WORK DONE FOR THEM IN THE UNITED STATES, by Harry Best, Ph. D., The Macmillan Co.,New York, 1919.

This is a very comprenhensive review of the subject matter and will be of great interest to those who have not given thought to this important subject as well as those who have the interest of this unfortunate class at heart.

THE ORTHOPEDIC TREATMENT OF GUNSHOT INJURIES, by Leo Mayer, M. D., Instructor in Orthopedic Surgery, New York Postgraduate Medical School and Hospital, with an introduction by Col. E. G. Brackett, M. C. N. A., Director of Military Orthopedic Surgery. 12 mo. of 250 pages, with 124 illustrations. Philadelphia and London, W. B. Saunders Company, 1918. Cloth $2.50 net.

This book is not what its title would at first thought seem to imply, but as the author states is for the purpose of emphasizing certain principles, and rules of guidance in the treatment of war injuries which have been found to be of value to himself in the treatment of injuries caused by explosives used in modern warfare. His technique in the treatment if contratures, nerve and tendon injuries shows evidence of good surgical judgement and the results obtained are very encourageing to others who have the handling and treatment of almost hopeless cases of this kind. The book is well illustrated and is worthy of the cordial reception given it by the profession in general.

A TEXT-BOOK OF OBSTETRICS, by Barton Cooke Hirst, M. D., Professor of Obstetrics in the University of Pennsylvania. Eighth edition, revised and reset. Octavo of 863 pages, with 715 illustrations, 38 of them in colors. Philadelphia and London, W. B. Saunders Company, 1918. Cloth, $5.00 net.

This old reliable text book has reached its eight revised and best edition. It is beautifully illustrated and well indexed, thereby contributing to the convenience of any who may be desirous of looking up some special point.

It is a very comprehensive treatise while at the same time eliminating a lot of "dead wood" which so frequently clattered up the old edition of many of our most valuable books. The chapter on Anomalies in the forces of labor is deeply interesting and of great value to the student and the beginner in obstetric practice. In short the book constitutes a throughly reliable specialist containing all the up-to-date and generally accepted views on the subject under consideration.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 3 HUNTINGTON, W. VA., SEPTEMBER, 1919.

Subscription $1.50 per Year
Single Copies 20 Cents

HOSPITAL MANAGEMENT.

By Chester R. Ogden, M. D.,
Clarksburg, W. Va.

Read before the West Virginia Hospital Association at the meeting in Clarksburg, May 19, 1919.

We are now living in a period of great transition. In this day of advanced thought and practical application, when the best brains of the nation and of the world are being concentrated on the solving of the many important problems that concern the enlightened human race, there is nothing that is so disturbing the minds of men throughout the world, as finances, and economy in the conduct of human affairs. The subject assigned me, and the occasion of its presentation, deserve the consideration of one more largely and thoroughly experienced in hospital management than I. When Dr. Guthrie notified me a few days ago that I was to speak on the subject of Hospital Economy, I fully intended to write him declining the position for the reason of my lack of experience in hospital management, together with the other reasons of being concerned in the preparation of the program of the State Medical Association meeting, the duties incident to my practice and the local medical society affairs. I neglected to write a letter of declination, before the program of the Hospital Association meeting was announced. I am, therefore confronted with the necessity, out of respect to the organization and to the local medical society of which I am a member, to make some effort toward fulfilling my obligation.

I have permitted myself to present a few thoughts for your consideration, on hospital economy, not as one who is prepared by training and associations to deal with subject as the occasion and its importance demands, but, rather from the reasons mentioned, with the hope that I may start a discussion of the subject that will be ably and helpfully presented by more experienced men who shall follow me. In the beginning I should make it plain that I have had

no experience in the active management of hospitals but that what knowledge of such matters I possess has come to me from my occasional visits to institutions in this and other countries and as a staff member of one of our local hospitals. There are so many and varied departments in every modern hospital in which economy is the big factor, that it would be impossible for me to do justice to them all were I experienced enough to discuss them, and had the time allotted me for their consideration. Being more or less actively engaged in the surgical department of the institution which has honored me by a place on its staff and acquiring what practical knowledge I may possess in hospital management by my observations in that department, I shall therefore, confine myself to the consideration of those questions that concern the surgical department of the hospital.

There is probably no phase of the hospital management less considered, and more important, than the proper administration of anesthetics. It certainly is not good practice, nor economy for hospitals to employ whatever means they may have at hand for this service. It is a great error for hospitals to make use of just any one to administer anesthesia and especially interns not properly trained during their course of study in the giving of anesthetics. Many of the larger institutions of the country are sending into their operating rooms interns fresh from the medical schools to perform the duties of a competent anesthetist and to assume the responsibility for the life of a patient. The service of a fresh intern is more dangerous as an anesthetist than that in the case of a man who occasionally gives an anesthetic in a rural district, for the reason that the first, the intern, in a large hospital, has larger responsibilities and is, as a rule, dealing with a class of cases that require very careful management, as to anesthesia. The whole question seems, therefore, to rest on compensation.

High grade anesthetists as well as high grade laboratorians and roentgenologists, should be the part of every hospital. Two kinds of anesthetists are suggested: one is a salaried worker and the other comes to the hospital by appointment. The one who comes to the hospital by appointment is usually the more expert, and the more expensive, while the advantages of the salaried resident anesthetist is that he is always available and more economical for the hospital, so much as to be a source of income. The special anesthetist's fee must be charged to the patient as an added fee and until the patients are taught the value of good anesthetic service they may raise objections to the added expense. Patients object a great deal more to paying a surgical fee when they find that their lives have been endangered by incompetent anesthetist.

The proper giving of an anesthetic is of vital importance to the patient's peace of mind and to the institution in which the anesthetic is given. When a patient is nicely cared for by the anesthetist, he later gives a pleasant report of it to his relatives and friends, which is contrary to the reports they give of the horrors they experience in the poor induction of the anesthetic. The patient who is drowned with ether early in the induction will give horrifying reports of the distress he experienced as he went into an unconscious state.

The trained anesthetist effects the institution in that he makes the sensation of going to sleep to the patients one of pleasure instead of horror and they are

more willing to return to the hospital for treatment if the occasion again demands and they will induce their relatives and friends to go to that institution when necessary to seek the help and protection of hospital service, during their illness. The proper handling of the anesthesia is a matter of great economy to the institution. The modern anesthetist shortens the period of induction, there is less waiting on the part of the surgeon and operating room staff.

If the operating room staff of surgeons and nurses are compelled to delay 15 or 20 minutes on account of improper induction of anesthesia, unnecessary expense is incurred to say nothing of the encroachment on the next operators schedule. The trained anesthetist maintains an even and proper degree of anesthesia during the operation, relieving the surgeon of any anxiety about the patient's condition, permits proper relaxation, avoids unnecessary delay in the operation, and, in many instances, saving the lives of patients, and an unusual waste of anesthesia. No operator need be reminded how troublesome tonsil operations are in which the patient alternately wakes up and the operation is suspended for anesthesia a few minutes, then more given, then operation, and the cycle is again repeated. With the aid of a trained anesthetist and modern equipment, continuous anesthesia is maintained as even and smooth in throat operations as in other surgical procedures.

Proper anesthesia enables the patient to recover much more rapidly and smoothly than improper anesthesia. Vomiting, shock, gas pains, noisy recoveries, sudden dilation of the stomach are controlled by careful anesthesia. How should we regulate the anesthesia fees? In the same way that we regulate the surgeon's fees, according to the patient's financial ability, and the character of the operation. The trained anesthetist is a valuable asset to any hospital, giving comfort to the patient, speed and support to the surgeon and preventing waste of time and anesthesia in the operation.

The majority of patients returning to hospital for subsequent operations will usually dread the anesthetic more than the surgical procedure for the horror of that strangling, struggling period in the induction of the anesthesia, is all they remember. They know nothing of the operation, since it is performed during the unconscious state. We must do something to rid our patients of the terrors of anesthesia. From the anesthetist we naturally go to the surgical assistant. The chief assistant to the surgeon should be one who is thoroughly familiar with every detail of the operation, to such an extent that if it be required, he is able to proceed with the operation and perform it in the inability of the surgeon in charge, to do so.

Team work is the most essential thing in the management for economy in all procedures in the operating room. The first essential to the good assistant is a wide knowledge of surgery, the methods of his chief and his plans of construction. Much time is wasted in operations by the use of inexperienced surgical assistants, whose inability to interpret the plans of the operator and his methods of construction add much to the length of time consumed, beside the waste of physical energy to the patient.

The using of physicians who refer patients to the surgeon, as assistants is not a wise, and, at times, not a safe practice. There are those practicing in populous rural districts, who are in such

close touch with the hospital to which they bring their patients and with the methods and procedure of the surgeon as to make them valuable as one of the assistants, but not the chief assistant, till their experience and judgment has been proved. There is much to be said for and against the using of physicians thus mentioned as an assistant, but as surgeons and hospital workers it dare not be denied, that the dealing with human lives is a sacred, a big thing, and too much care and experience can not be exercised in their behalf. The surgical assistant should be, if possible, of the very closest relationship in experience and methods to that of the operator.

The methods of using senior nurses in the operating rooms of our hospitals, where a training school is a part, while necessary for the instruction of the nurses in surgical technic, is, as a rule, not the best practice. The majority of our training schools require only a few months in the operating room training to graduate a nurse, and she does not remain long enough in the operating room to qualify her for the important position of chief operating nurse. Every operating room should have its experienced and tactful chief nurse, and not intrusted to a nurse in training. Very often while in training there are nurses who show special merit and natural ability for a succesful and valuable operating room career, and such nurse should be encouraged in that direction and kept long enough in that position to make her service valuable to herself and to the institution. The most important thing in the operation is to save and relieve the patient, the next is to relieve the patient and not produce other troubles in performing the operation, and, lastly, to operate with speed.

The inexperienced nurse, like inexperienced anesthetist, or assistant, cause much waste of time, suspense and irritation to the surgeon and threatened danger to the life of the patient. Competent assistance in every procedure in the operating room offer one of the very best factors for economy in hospital management to be considered. A cured patient, who is relieved of his afflictions tenderly, gently and swiftly is the very best advertisement for a hospital. It is important that the service, the equipment, the many necessary things concerned in the care and treatment of the sick should be the very best; for, good service, good appliances, good after care, good food, and personal attention from those in charge of the hospital, is real economy. Still, many things done, and many things used in our hospitals today can be improved upon, with a very great saving to the hospital, and without any depreciating effect on the patient's safety and comfort.

From my observation, it appears that there are many wastes that occur constantly in operating rooms that should be diminished. There are many little attentions the patient should receive, that cost nothing to the institution, but add much to its success. The successful merchant does not sell goods cheaper than his competitor, for prices are largely fixed by custom, but, one merchant is more successful, because of his little personal attentions toward the comfort and well being of his customers. It is the way in which he bows them in and bows them out. I have noticed many cases of severe irritation of face and eyes, in the careless administration of anesthesia. Every patient

taking a general anesthetic should have the eyes and face carefully protected to avoid this unpleasantness. Absorbent gauze or cotton saturated with olive oil and laid over the patient's eyes during the administration is a splendid safeguard.

The unnecessary application of iodine to the skin, especially the abdomen, may be a cause of irritation to the patient that should be avoided. The use of large amounts of gauze and gauze sponges, while necessary in certain cases, is as a rule, unecessary. The surgeon who is familiar with his anatomy usually clamps the important vessels before they are divided and either prevents hemorrhage or arrests quickly after its appearance. A dry wound is the best wound, beside hemorrhage prevented or promptly checked is often saving of the patients, for, life is the blood and blood is the life. The use of several thicknesses of gauze over the line of incision is in most cases a waste for the reason, that if the skin is closed carefully very little covering is required. In the majority of wounds, suture lines painted with iodine and wiped off with alcohol, is a splendid procedure, while the use of collodion to seal over the wound relieves the necessity of much gauze. One of the most common wastes occurring in the operation is that of large amounts of cat gut and other suture material. The average operator has not learned the art of tying his knots well to the end of his suture in starting his suture work.

Safety first is the principal admonition, suture so as to protect the patient, but, at the same time, prevent unnecessary use of suture material. I have been struck forceably by the large and what seems to me an unnecessary use of adhesive plaster to cover abdominal and other wounds. The abdominal wound probably sutured and covered with gauze, requires, as a rule, much less adhesive tape than is commonly used by operators. A few strips of adhesive to keep the dressings intact with a suitable abdominal binder is sufficient. These binders can be washed, and used repeatedly.

The average, clean abdominal wound requires but few dressings, surely none before the fourth or fifth day after the operation. A careful nurse or assistant should follow the patient from the operating room to see that he is breathing freely and that the hot water bags are not permitted to burn the patient after he is put to bed. There should be no excuse for this quite frequent occurrence of burns on patient from hot water bottles. Warm up the bed while the patient is being operated on and remove the hot water bags after patient is put in bed, is the safest procedure. The surgeon's work is not ended with the taking of the last stitch. The personal after-care given the patient by the surgeon or his assistant is of vast importance to the successful outcome of the case, and to the patient's comfort and well being. By visiting patients regularly after operation, the surgeon is able to note the progress of the case and if there are any complaints they are brought to light. The daily visitation of patients not only concerns the surgeon and physician but the administrative officer of the hospital as well. The administrative officer of the hospital can not make a success of the institution by sticking too closely to his desk. He should be most of his time out in the hospital overseeing the wards and the rooms, chatting with the patients and taking that personal interest in each patient that is always so much appreci-

ated by all concerned. Constant personal observation of all that is going on in and about the hospital, by the ones in authority means that the hospital is not permitted to run down, but that details which otherwise would escape notice are given immediate consideration.

These are some of the many things that a hospital management has to consider and while they have been touched but lightly and inadequately in this paper, it is to be hoped that these few remarks may be at least a means of elictiting from others here tonight, a fuller and more practical discussion.

LESSONS FROM THE WAR IN THE CARE OF INDUSTRIAL INJURIES OF THE EXTREMITIES.

DAVID SILVER, Lt. Col., M. C.,
Pittsburgh, Pa.

Read at Fifty-second Annual Meeting West Virginia Medical Association, Clarksburg, May, 1919.

Those of us who practice in great industrial centers such as these in this great basin of the upper Ohio and its branches, with its huge manufacturing plants and its vast coal fields, are being constantly called upon to care for injuries of the extremities whose character is similar to those of warfare, while the impairment of function which follows them is identical. Although our participation in the struggle has happily been too short and our casualties too few for the fullest trial of the newer methods in our own Army, we have been fortunate in having had a large number of our profession actively engaged with the French and the British from the beginning of the war. Our experience is quite sufficient, therefore, to enable us to estimate accurately the value of the methods used and their application to industrial conditions.

Beginning first with the question of the transportation of the wounded, the value of the application of proper splints at the earliest possible moment in compound fracture of the long bones has been strikingly demonstrated. In the British service the mortality from fracture of the femur in the early part of the war was 80 per cent; during this period the wounded were being transported to the rear before the splints were applied. The practice of first applying the Thomas splint before moving the wounded was then instituted, with the result that the mortality was reduced fully 50 per cent. In the work of our own army especial attention was paid to early splinting from the first. The splints were standardized, and splint teams were organized and drilled in their proper and rapid application. The work of these teams received general commendation. Our experience as to the value of this practice entirely corroborates that of the British.

This lesson is too striking to be disregarded in civil practice. While it is true that the workman who sustains a fracture of the arm or leg in the workshop or mine rarely lies for hours before help reaches him or has to be transported for miles under as adverse conditions as those of warfare, yet the advantage to be gained by the application of the proper splints before moving him from the site of his injury are still sufficiently clear and definite. The additional trouble is slight; but two splints are required,—the regular Thomas knee splint for the lower extremity and the modified Thomas for the upper. Thus splinted, the injured workman may be transported to the hospital with greater

comfort, with less danger from shock and with less risk of further displacement of bone fragments or laceration of important tissues. It can be confidently expected, therefore, that this procedure will become the established practice in industrial work.

The history of the treatment of gunshot wounds is too well known to require more than the briefest mention. When seen within a few hours of their occurence, the primary, or delayed primary, suture of such wounds, after the removal of all foreign matter and all devitalized tissue, has yielded splendid results, not only as regards wounds of soft parts but of the joints as well. In infected cases, anyone who has watched the progress of wounds handled by the exact application of the Carrel-Dakin technic can have no doubt of the efficacy of the method. It is not a method, however, which will give results in the hands of the careless or the indifferent; success demands the most painstaking care.

Naturally these same methods of wound treatment are applicable to the wounds of industry, and in proportion as the conditions are more favorable, is the excuse for failure less.

Very much has also been learned of the care of the amputated. Owing to the enormous number of the amputated, this problem has received an unusual amount of study by all the countries engaged. From the foreign literature, one might imagine that great advances has been made in the construction and design of permanent artificial limbs but investigation seems to show few, if any, notable improvements over the best American types. The American models of both arms and legs are apparently still recognized as the standard. Very definite improvement has, however, been made along three lines,—the care of the stump, the use of temporary appliances, and training in the use of the artificial limb.

It must be admitted that in the past surgeons have been inclined to take little interest in the amputated after the healing of the incision, but have turned the case over, usually without supervision, to the care of the artificial limb maker. This has been to the detriment of both the patient and the surgeon.

By the proper use of the several months that intervent between the performance of the amputation and the fitting of the artificial limb, a better functioning stump can be secured, (particularly in amputation of the lower extremity), the fitting of the permanent limb made more easy and more satisfactory, and the period of incapacity very considerably shortened. The information gained by the surgeon in carrying out this treatment affords him a most valuable means of control in the perfection of his operative technic.

Stump treatment is indicated broadly to:

(a) Hasten absorption;

(b) Prevent the formation of exostosis or limit them to less harmful locations;

(c) Prepare the stump tissues for the new function of weight-bearing;

(d) Guard against the development of limitation of motion and of deformity;

(e) Limit muscular atrophy and preserve coordination in the muscles controlling the joint or joints above the site of amputation.

The measures necessary to meet these indications are simple. The essential ones are: bandaging, massage, hydrotherapy, exercises, and the early application of some form of temporary artificial limb.

At first nothing more than the customary dressing is needed but after the incision is healed, a bias flannel or other elastic bandage is used. The object is not to produce atrophy, as is the custom with artificial limb makers, but simply to prevent swelling and congestion. Bandaging is required all the time, both day and night, during the first months, except for the periods during which the temporary artificial limb is worn.

The indications for massage are sufficiently clear to need little elaboration. It may be begun two or three days after the operation in below knee amputations, being then confined to the region above the dressing. As soon as the wound is healed, massage of the stump itself may be begun, the region of the incision being, of course, avoided for the first. The depth and force of the massage, as well as its duration and frequency, are increased as the tolerance of the stump permits.

Hot packs, warm baths, and the Scotch douche are useful measures in promoting the circulation and hastening absorption.

Three types of exercises are valuable: (a) pressure exercise, (b) passive movements, and (c) active movements. The *pressure* exercises are used to check the formation of exostosis on the end of the bone and prepare the stump for end bearing. At first, while the patient is in bed, the bandaged stump is simply pressed against a cushion or other pad, for several minutes at four or five hour intervals; later, when the patient is up and the stump thoroughly healed, a stool of the proper height and a cushion are used and a gradually increasing amount of weight borne on the end of the stump. *Passive movements* are necessary from the very first in order to guard against limitation of motion, the first step in the development of deformity. In amputation of the thigh, for example, it is customary to place a pillow under the stump, maintaining it at about 45 degrees of flexion; furthermore, the spica bandage that is applied tends to hold the stump in abduction; each day care must be taken, therefore, to hyperextend and adduct the stump fully in order to guard against the development of limitation of motion. Similar precautions are necessary in other regions. *Active movements* are of value not only in guarding against limitation of motion but also in preventing the atrophy of disuse, which are two of the chief causes of discouragement when the use of an artificial limb is begun. "Considerably strength is obviously required to manipulate an artificial limb satisfactorily," the demand is naturally greater with the shorter stumps and is still further increased if joint stiffense is present. Hence, active exercise should be begun at the earliest practical moment and continued systematically once, or better twice, daily. The "stump drill" used in military hospitals has proven of the greatest value for these purposes and for its effect on the morale of the amputated as well.

Military experience has fully demonstrated the great value of the use of the temporary artificial limb: a better functioning stump is secured, the period of incapacity for work is shortened and the morale of the patient is improved. Many types of temporary legs have been used in war but the only one that need be now considered is that which can be employed to the best advantage in industrial work. This is unquestionably the simple peg-leg with the plaster-of-Paris socket; it is light, comfortable, simple in design and easy of construction. In

a satisfactory flap amputation with primary suture, the use of such an appliance can be begun within ten days of the healing of the wound. This temporary leg is worn at first for a period of only a few minutes, the duration and the number of the periods being gradually increased according to the tolerance of the patient. The size and shape of the stump usually change rather rapidly under the new function and several sockets are required before the stump is ready for the permanent limb.

Another subject, and the last to be mentioned, which has received an unusual amount of consideration is that of the prevention of deformity and the restoration of function in injuries of the extremities. The necessity for the conservation of man-power focused attention, as nothing else could, upon the great economic loss due to the neglect of this essential phase of treatment.

The conditions under which deformity develops and the mechanical laws which govern it are clear and well defined. Granted a correct diagnosis of the lesion present, it is possible to prognosticate accurately the type of deformity that will follow and hence to prescribe the preventative measures necessary. Similarly the pathological changes that take place when function is temporarily suspended and the theapeutic measures that are necessary to counteract them are also matters of common knowledge. In view of this, it has been a keen disappointment in the past to find such a large proportion of the chronic surgery of the extremities made up of preventable deformity.

Recognizing this and profiting by the experience of our Allies in the first years of the war, the fight against deformity was begun in our own army at the front line by the application of proper splints at the earliest possible moment and was continued by the exercise of careful supervision until the final disposition of the case had been made. These efforts have been successful to an unusual degree, since, with the exception of cases coming from unsupervised areas, comparatively few instances of preventable deformity have been noted among the returning wounded.

In the restriction of function, extensive use has been made of the various physio-therapeutic measures and of curative workshops. Fortunately, the conditions under which the work was being done made necessary the choice of the simpler methods and the experience gained is, therefore, of a more practical character. The necessity for making provision for the systematic use of physio-therapeutic measures has been clearly demonstrated, if such demonstration were required. There has also been abundant evidence of the value of selected types of work in the correction of deformity and the restoration of function.

In industrial work, therefore, the need for improvement in certain directions is evident. More attention must be paid to the prevention of deformity by the use of preventative measures from the inception of the injury. Industrial surgeons connected with large companies must secure the installation of the simpler equipment necessary for carrying out physio-therapeutic treatment. With comparatively simple equipment and the assistance of a person trained in its use, (the Reconstruction Aides of the Army will be available for such work), very much can be done to restore function, limit the capacity of incapacity and prevent dissatisfaction among the workmen. More can be done also in putting injured men back to

work at a much earlier period on selected types of work, adapted to the correction of deformity or the restoration of the lost function.

Jenkins Arcade Building.

ELECTRICITY IN GYNECOLOGY

Read at Fifty-second Annual Meeting West Virginia Medical Association, Clarksburg, May, 1919.

By Oscar B. Beers, M. D.,
Buckhannon, W. Va.

Electricity has been rescued from the hands of the charlatan and has found its place in rational therapeutics.

The mystery surrounding this great force has in a measure been cleared away, and that which has lain dormant for so many centuries has been harnessed to do the bidding of man.

Many of us yet have a vague idea of the therapeutic action of electricity and ascribe its virtues more to the psychical effect it has upon the patient than to any tangible action.

This however, is far from the truth and we can get as clear cut action from this modality as we can from any drug in the matera medica.

It is not the intention of this paper to go deeply into the subject, but to touch upon the use of the direct current only. It would be a waste of time and tedious to go into the physics of electricity, the subject can be studied from any good text.

It is enough to say, that the direct or continuous current is the one that gives a chemical action. It is the one that decomposes water, metals, salts, etc., and this action is what makes it so useful in the treatment of certain disease of the sexual organs of woman.

This current is derived either from a battery of cells or from a direct current generator. We always have a reliable meter in the circuit so as to know the exact amount of current being used. It is mild and without shock, or other unpleasant action.

The success in the use of this agent depends to a great extent upon the knowledge of the action of the different poles, as the pos. and neg. are exactly opposite in effect upon tissues, the pos. liberates oxygen, the neg., hydrogen, pos. is acid, neg. alkali, p. stops bleeding, n. will increase it, pos vaso constrictor, n. vaso dilator, etc.

The breaking up of a substance into its elements by electricity is electrolosis, the breaking up of a metal into its salts and depositing them in the tissues of the body is metalic cataophroresis. By this action upon metals we can utilize the combined effect of the p. pole and the metal salt at the same time, as for example, when a copper sound is attached to the p. pole we get the action of the pole which is antiseptic and astringent, combined with the chloride of copper which is driven into the tissues as this salt has an affinity for the n. pole, which is the indifferent electrode. We therefore, have a powerful remedy under perfect control with which to combat infections and inflammatory conditions of the uterus and its annexa.

The apparatus for this work is simple. First we have the source of current, either a battery or cells or a motor generator. A switchboard containing a reostat, pole changer and milamter, is interposed in the circuit. This is very important as by this means we are enabled to regulate the dosage, second, there are the electrodes and conducting

cords which are here on exhibition. The active electrodes consist of the intra-uterine in different sizes, made of copper, the vaginal copper ball electrodes also of copper, these to be used on the pos. pole and the nickle dilating sounds used on the neg. pole. The indifferent electrode is always a large wet sponge with a rubber covering.

Now, having our apparatus in working order and a fair knowledge of the action of the modality which we are going to use, we are ready for the first patient. She presents herself with a history of chronic invalidism, she is anaemic, run down and nervous. Her complaint dates back to an abortion two years ago, she has backache and a sensation of weight in the pelvis when on her feet, a frequent desire to urinate, bowels constipated. On vaginal examination we find a large retroverted uterus, very sensitive to touch, the os stands wide open almost admitting the index finger, there is a purulent discharge oozing from it, the slightest touch to the endometrum causes bleeding. Here we have a chronic infectious endometritis with subinvolution. What is the treatment? Do we curet? No, curatage is dangerous in these cases; it opens the way for an extension of the infection here present. In the opinion of the authority of this paper, the curet is a dangerous instrument and should only be used in case of retained secundae following an abortion. Do we suspend the retroverted uterus? Why should we in its inflamed and engorged condition do so? This would not be rational treatment. Do we use topical applications of iodine, etc.? No, these things only have a superficial action at most, and do not penetrate the diseased tissues. The indications are to get rid of infection, overcome inflammation and restore the organ to its normal condition.

What is the treatment? Remembering the action of the p. pole which is astringent and germicidal and also remembering its action on copper and that the chloride of that metal is itself astringent and antiseptic and is driven deeply into the tissues because of its affinity for the negative pole, we place the patient on the table in the gynecological position. A large well wetted sponge electrode is placed upon the abdomen and connected with the neg. pole of the direct current, the os is exposed by means of vag. speculum and as large a copper electrode as possible introduced and connected with the pos. p. We turn on the current through the reostat till the milameter registers 30. The time of treatment is usually ten minutes when current is turned off gradually and the intra uterine electrode disengaged. The treatment should be given three times weekly till improvement, then twice a week.

What happens? The discharge gradually lessens, the uterus contracts down and resumes its normal position, the backache and dragging down sensation disappears. The change in the general condition is wonderful, nervousness disappears, she gains in weight, bowels and bladder cease to give complaint. She is a new woman.

The same technique covers all the inflammatory conditions of the pelvic organs, endocervicitis, overitis, metritis, salpingitis and erosions all yield to the same form of treatment. For treating the annexa the large copper ball is used, being covered with absorbent cotton and gold beaters skin, and is pressed firmly against the effected organ while current is running.

Outside the local action described we must not forget the powerful tonic effect this modality has upon the nerve centers.

We will now take up briefly the use of the neg. p as the active electrode. We have with us always that unfortunate class who suffer from some abnormality of menstruation. It is here again that electricity shines as a therapeutic measure.

Our next patient presents herself with a history of amenorrhoea, the flow is scant or altogether absent. She has been married for five years and has never been pregnant, she longs for a child. On examination we find a small uterus antiflected and with stenosis of the os. Remembering the action of the neg. pole as stimulating and resolvent, we place the patient as before in the dorsal gynecological position, using the pos. pole as the indifferent electrode. A small olive pointed nickle electrode is selected, the os is exposed as before, the sound being gently pressed against it. After a few seances using the same technique as described, the electrode will slip through and we will have complete dilitation. At this stage of the treatment it is well to interrupt the current through a reotome which is a part of all up to date wall plates. The indications are to develop the uterine muscles so it may be able to properly functionate and to straighten out the canal and relieve the stenosis. In the neg. pole of the direct current we have an ideal remedy to bring about the desired results.

Our third and last patient tells the oft told story of painful menstruation, dysmenorrhoea, she spends several days in bed at each period and suffers untold agony, she has taken gallons of medicine and has been dilated and curretted without results, the flow is abnormal, clots and shreds are passed each time, a case of membranous dysmenorrhoea. The indications for treatment are to destroy the diseased endometrium and stimulate a healthy growth. Here we utilize the solvent action of the neg. pole which decomposes the diseased membrane and favors its expulsion.

It is the hope of the author that this brief paper will give some idea of the wide field for the use of electricity in medicine and that it will stimulate a desire among us for the study and use of this valuable agent. We will not burden you with a list of cases treated but will say in lieu thereof that for many years we have used it with gratifying results both to ourselves and our patients. We are too prone to cut scrape and remove the female organs of generation on general principles. Thousands of tubes, ovaries and uteri have been needlessly sacrificed. Why not remove the male organs for orchitis, urethritis, prostatitis, strictures, etc., just as rational surely? With a plea for the more conservative means in gynecology, I thank you for your attention.

OVARIAN FIBROID

Report of Case by
CARTER S. FLEMING, M. D.,
Fairmont, W. Va.

Fibroid tumors of the ovary are sufficiently rare in literature to warrant careful study and reporting of these tumors. They represent about 2 per cent of all ovarian tumors and vary in size from a slight enlargement of the gland to the size of a large grape fruit or even larger. The following illustrates

Fig. 1. Photograph. Size of Tumor 8 X 10 X 15 C. M. Weight 9 Ounces.

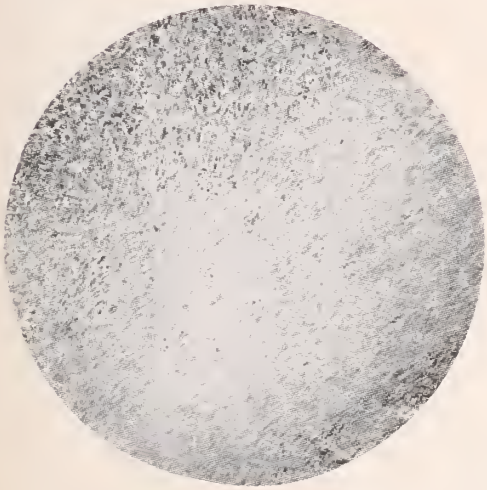

Fig. 2. Microphotograph. Low Power. Showing dense fibrous tissue.

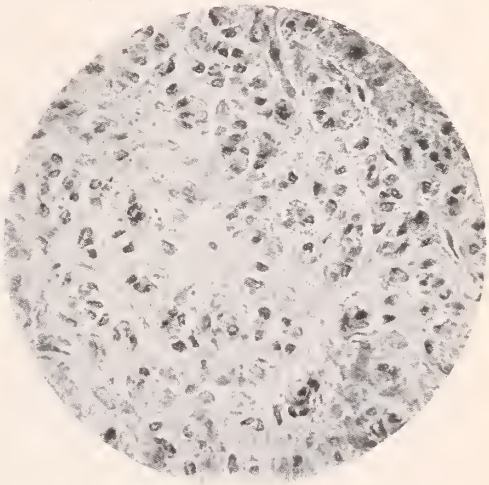

Fig. 3. Microphotograph. High Power. Showing cellular arrangement amid bands of fibrous tissue.

and describes one of these tumors removed by the writer and his associate, Dr. E. P. Smith:

History—Mrs. S., age 37, married, white, American.

Complaint—Backache, weakness, abdominal pain, a dragging sensation in the pelvis and loss of weight.

Family History—Mother died at 56 of heart trouble. Father died at 60 of nephritis. Otherwise uneventful.

Personal History — No operations. Usual diseases of childhood except diphtheria. Acute articular rheumatism at 20. Malaria twenty years ago. Has been troubled for the past two years with backache, weakness, occipital headache, dragging sensation in pelvis, etc. States that bladder does not hold much and that she has to urinate frequently.

Appetite—Good.

Bowels—Constipated.

Micturition—Very frequent but not painful.

Vaginal Discharge — Moderate leukorrhea.

Pregnancies—One going to term and ending in normal labor. Two abortions at about the second month, the cause of which was not discoverable.

Menstruation—Menstruated first at 12 years. The periods were irregular until marriage. She now menstruates every twenty-eight days, the flow lasting from four to five days. There is rather severe pelvic dysmenorrhea, especially on the left side.

Examination—May 8, 1918.

General Appearance—A rather poorly nourished woman of nervous type. Head: Teeth in poor condition with pyorrhea in the upper mouth. Tonsils, ragged. Chest: Negative. Abdomen: Slightly dome-shaped. The right kidney is palpable to its upper pole. Marked tenderness over left iliac fossa where a mass can be felt. Extremities: Negative. Skin: Negative. Pelvis: Moderate relaxation of the pelvic floor with slight decensus of the anterior vaginal wall. Cervix is hard and presents a healed, deep bilateral laceration. The uterus is somewhat enlarged and the fundus is directed backward. The anterior surface of the uterus presents several irregular nodules. To the left of the uterus is a hard mass, the size of a grape fruit, not acutely tender but fixed in the pelvis. No right lateral disease. Urine: Slight trace of albumin. Blood: Negative. Temperature: Normal. Pulse: 80. Diagnosis: Movable right kidney, not causing symptoms. Pelvic floor relaxation. Cervical laceration and erosion. Multiple fibroids of the uterus. Left sided tube-ovarian disease.

Advice—Operation.

Operation—Cook Hospital, May 10, 1918.

After repairing the pelvic floor relaxation, the abdomen was opened in the median line below the umbilicus with the patient in the Trendelenberg position. A considerable quantity of free fluid was found in the abdominal cavity. The omentum was adherent to the fundus of the uterus and to a mass in the left pelvis. This was ligated and removed from the field affording a good view of the following: Uterus somewhat enlarged, in retroversion, with two small fibroids on its anterior wall. The left iliac fossa was occupied by a hard mass resembling a fibroid, involving the tube and ovary. This mass was adherent to the lateral wall of the pelvis and to the sigmoid. The right ovary was sclerotic and the tube was congested. The appendix was long, tortuous and adherent throughout its entire length to the cecum.

Operative Procedure—Pelvic floor re-

pair. Hysterectomy. Bilateral salpingo-ophorectomy which includes the removal of the left sided mass. Appendectomy. The patient was infused with 500 C. C. of sodium bicarbonate and dextrose solution before leaving the table.

Immediate Result—Good. Uneventful recovery.

Examination of Tissue Removed—The small tumors on the anterior wall of the uterus were ordinary fibroids. The large tumor (Fig. 1) is the size of a small grape fruit, nodular, hard, and its cut surface presents a smooth, glistening appearance. It is compact in structure, and the curling bundles of fibres are quite apparent to the naked eye. The tumor is devoid of pigment. Microscopically, the tumor is shown to contain many fibroblasts, spindleshaped, with a rounded extremity. The cells contain much chromatin for this type of cell. An occasional grouping of the cells is noticed, especially near blood vessels where the bundles whirl. Figure 2 shows the low power picture of the tumor; Figure 3, the high power.

Dr. Ernest L. Scott of Ohio State University, who prepared the microphotographs of this tumor, writes me as follows:

"May I suggest that this photograph presents many smooth muscle cells scattered thruout the dense connective tissue and that this at times leads to a confusion of terms,—even when we all mean the same thing, just as the tumor of the uterine wall. In the terms of general oncology, this slide places this tumor in the class with leiomyoblastomata of the scirrhus variety. As surgical pathologists use the term ovarian fibroid, it applies to this tumor. It is true that ovarian fibroma contain muscle cells but if other sections contain as many muscle cells as this one, I would be inclined to class it as a myomatous ovarian fibroma."

These tumors are ordinarily considered as benign but they deserve careful study as sarcoma occasionally develop from them. Reel reports a case of sarcoma arising from a fibroid of the ovary and has written an excellent article on diffuse fibromas of the ovary, reporting several cases.

References—1, Reel, Diffuse Fibromas of the Ovary. American Journal of Obstetrics and Diseases of Women, Vol. LXXV, No. 3, 1917.

Professional Building.

A COMPARATIVE STUDY OF THE ORIGINAL WASSERMAN REACTION AND THE HECHT, WEINBERG, GRADWOHL MODIFICATION.

By M. E. STEINBERG,
M. S., M. D., A. A. Surgeon, U. S. P. H. S. and Mark Bergeron*.

The skepticism in the Wasserman reaction on the part of some of the medical profession is due mainly to the fact that occasionally contradictory results may be obtained on the same specimen of blood sent to various laboratories or to the same laboratory at different times. While this can mostly be explained by the employment of untrained serologists, the original technique, as demonstrated by Gradwohl**, is not altogether faultless. By heating the serum some of the syphilitic antibody may be destroyed and complementoids produced. The natural amboceptor (sheep's cell hemolysin) is present in so

*From the Base Hospital, Government Explosive Plant "C," Nitro, W. Va.
**J. A. M. A., 1914, 73, 240.

many sera and occasionally in such high concentration that a negative reaction may be obtained when the serum is really positive. Again, the Wasserman reaction may be negative when clinical symptoms and therapeutic tests clearly indicate the presence of syphilis.

That the Wasserman reaction is not always 100 per cent positive in all the syphilitic diseases has been shown by various statistics. In primary syphilis the Wasserman reaction is positive in from 80 per cent to 90 per cent. In untreated secondary syphilis the reaction is positive in 90 per cent to 100 per cent. In untreated teritary syphilis the reaction is 96 per cent positive. Untreated parasyphilitic diseases give a very high percentage of positive reaction.***

The above figures would indicate that the Wasserman reaction is a very valuable test in the hands of a trained serologist. Being a very delicate reaction it should be performed not only with the greatest care and precision, but also in duplicate, using the classic reaction and some modification of the latter.

For the last few months we have been using the Hecht, Weinberg, Gradwohl reaction as a check on the original technique. In this reaction the natural hemolytic amboceptor present in the human serum and the natural complement are both utilized.

The technique of the Hecht, Weinberg reaction as modified by Gradwohl are conducted in this laboratory is as follows:

A row of six tubes is set up for each specimen of blood. To the first three tubes add respectively .2 cc, .3 cc and .4 cc of a 5 per cent suspension of sheep's red blood cells. Then introduce one drop of the unheated serum in each of the 6 tubes, and to tubes No. 4 and No. 5 add the necessary amount of acetone insoluble antigen and alcoholic antigen, respectively, as determined by previous titration. Enough saline is then added to each tube to make 3 cc of the contents. The last tube is the serum control. All the tubes are then incubated for 30 minutes in the waterbath at 37°C.

STEP NO. I

Tube No. 1: Add .2cc RBC, Serum, Saline Qs, 3cc.

Tube No. 2: Add .3cc RBC, Serum, Saline Qs., 3cc.

Tube No. 3: Add .4cc RBC, Serum, Saline Qs., 3cc.

Tube No. 4: Add Serum, Acetone-insol antigen, Saline Qs., 3cc.

Tube No. 5: Add Serum, Alcoholic antigen, Saline Qs., 3cc.

Tube No. 6: Add Serum, Saline Qs., 3cc.

At the end of 30 minutes the tubes are removed from the incubator and the quantity of natural amboceptor, expressed in number of cc's of red blood cells hemolyzed, determined. The complete hemolysis in tube No. 2 would indicate that .3 cc of a 5 per cent suspension of red blood cells would be the unit of natural amboceptor for the particular serum; half of this quantity of red blood cells is then introduced into tubes No. 4, No. 5 and No. 6, and the whole set incubated again for 30 minutes in the waterbath at 37°C. The results are read in the same manner as in the original test.

The several hundred specimens of sera examined in this laboratory showed 96 per cent to contain natural amboceptor. In case, however, that there is not enough amboceptor in the serum examined, another serum may be used to supply the hemolytic amboceptor.

***Kohlmer: Infection, Immunity and Specific Therapy.

In three hundred duplicate sera examined by the original Wasserman technique and the Hecht, Weinberg, Gradwohl modification we found that the latter is a very sensitive reaction, giving stronger reactions or a positive reaction when the original may be entirely negative. When the original reaction was entirely negative, 2.6 per cent gave 1 or 2 plus positives by the Hecht, Weinberg, Grodwohl modification. When the original gave 1 plus positive, the Hecht, Weinberg, Gradwohl modification gave 2 and 3 plus positives in 1 per cent of the cases. In 3 per cent of cases the original technique gave 2 plus and the Hecht, Weinberg, Gradwohl modification 3 plus. In all three hundred duplicated sera examined the Hecht, Weinberg, Gradwhol technique gave a stronger reaction or positive reaction in 7 per cent of tests when the original Wasserman was negative or weakly positive. The Hecht, Weinberg, Gradwohl test is not only valuable as a duplicate test to avoid any discrepancy in the technique of the original reaction, but by means of this reaction an occasional positive reaction may be obtained, when by the original technique the serum is negative.

FABLES FOR THE KANSAS DOCTOR

By Rennig Ade.

(The following might appeal to some of us in West Virginia and is published as a gentle reminder of past indiscretions.—Editor.

Once upon a time there lived a Kansas doctor who was known in Wichita and Kansas City, Mo., as E. Z. Mark.

His name was listed as No. 7 on the Oil Prospectus, as No. 12 on the Florida Swamp Company, as No. 14 on the California Pecan Orchard, and as No. 23 on the New Zealand & Alaska Smelter Company. This meant that there were only seven, twelve, fourteen and twenty-three respectively more gullible individuals in the United States of America.

Sometimes he had as much as two hundred dollars ahead in the bank, and he would look hopefully at each stranger who entered his office. Usually he had to wait no longer than two or three days, when two smooth-shaven prosperous individuals would breeze cheerily in. The following program would follow:

"Is this Dr. Mark? Blink is my name —H. M. Blink of Blink & Stinger of Kansas City. Doctor, shake hands with Mr. Stinger. Mr. Stinger is president of the Gila Lizard Company of Arapahoe, New Mexico. Our plan is to cross the Gila lizard with your native jackrabbit, thus securing a succulent meat, and combining the prolificacy and fecundity of the rabbit with the native inertia of the lizard. The product of this union should be a valuable food easy of capture. Your name has been handed to us as one we could rely upon to become interested in our proposition. We are permitted to have ten stockholders only in each city of less than one thousand inhabitants. We are also desirous of having you on our board of directors."

The latter argument always sold Doc a small block of the stock. That is, he would buy $300 worth; $200 down, and the company would carry him until fall for the balance at only 8 per cent. The banker, who was a warm friend of Doc's, shaved the note $25 that evening after business hours, and put the stock salesman next to another likely buyer.

Doc worked hard and managed to

keep the children in school and let his wife go home every eight years on a visit. He belonged to all the lodges in town except one, the Rebekahs, and kept his dues paid up. Mysterious buttons and insignias stood out all over his person, and he had vowed and promised and sworn not to do any of the things that he had ever had any desire to do. Upon close inspection of his dead-beat patients he usually found them occupying high positions in one of his lodges.

He always figured that some day a dividend would be declared in one of his blue-sky ventures, but this never happened. The best he could ever do was to trade $500 worth of old stock in the Pan-Hysterectomy Motor Company for $100 worth of stock in a company that was planning to open clothing stores in the Fiji Islands.

One day the Old Man with the Scythe came along, and with one long swing Old Doc was gathered in.

After a decent interval the estate was carefully invoiced. The old car sold for two hundred dollars, and the Liberty Bonds only had to be discounted 8 per cent. Fortunately there was only $200 worth of the latter, so the loss was not great. The Automatic Typewriter & Harvester Company stock that had cost Doc five dollars per share was quoted at 11 cents and no buyers. The rest of his stocks were not quoted. With the little insurance, Mother managed to pay off the debts and make a respectable showing at the funeral. The obsequies were conducted by representatives of two or three lodges who read their parts and hurried through on account of the ball game which was to start promptly at two-thirty.

Moral—If you would be properly invoiced, get out of the way.—Kansas Medical Journal.

SYPHILIS: WHEN IS THE PATIENT CURED

Dinnick says that if after an intensive course of arsenical medication and the continuous exhibition of mercury for two years, a patient can show two years' freedom from physical signs of disease, has a persistently negative blood serum, a spinal fluid which shows no variation from normal in either pressure, globulin content, or cellular count, and which gives a negative Wassermann in amounts of 2 c.c.; and if after a period of freedom from treatment these conditions are still present and persist in spite of provocative treatment, it is justificable, in our present state of knowledge, to presume that the patient is cured. Finally, should this patient subsequently develop a fresh chancre at a site differing from the first, this would be a reinfection. For syphilis does not confer immunity, and the real interpretation of all alleged immunity is that the so-called immune person is an active syphilitic.

DIGESTIBILITY OF BACON

Katherine Blunt and Marguerite G. Mallon (*Journal of Biological Chemistry,* May, 1919) performed experiments to test the accuracy of Rubner's statement that bacon fat showed a low utilization, 17.4 per cent. of the fat eaten being lost in the feces. Their work was not in accord with this, as they found that bacon fat was about as digestible as other soft fat, and that the nitrogen is also as well digested as that of other meat. The average percentage of digestion of the fat of slightly cooked bacon was 96.3, and of much cooked bacon ninety-seven, while the average percentage of utilization was respectively 92.8 and ninety-five.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., September, 1919.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription . . . . . $1.50 per year
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—Robert J. Reed, Wheeling, W. Va.

FIRST VICE-PRESIDENT—J. Frank Fox, Bluefield, W. Va.

SECOND VICE-PRESIDENT—S. M. Mason (deceased), Clarksburg, W. Va.

THIRD VICE-PRESIDENT—C. M. Hawes, Huntington, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A. FOR 1918-1919—F. LeMoyne Hupp, Wheeling, W. Va.; Alternate—Henri P. Linz, Wheeling, W. Va.

DELEGATES TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg, W. Va.; Alternate—W. W. Golden, Elkins, W. Va.

COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; H. P. Linz, Wheeling, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; L. H. Forman, Buckhannon, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; J. E. Rader, Huntington, W. Va., two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, W. Va., one-year term; E. H. Thompson, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—H. L. Goodman, Charleston, W. Va., one-year term; Charles O'Grady, Charleston, W. Va., two-year term.

THE BULLETINS OF THE STATE DEPARTMENT OF HEALTH

From time to time, comments upon the activities of this department have been made in this Journal.

Among the various things being done by the department to better the health of our citizens is the publication of a bulletin. Whether or not the members read these when received we can not say. If they are neglected a very great store of particularly practical information is overlooked.

This comment is called forth by the issue for July, 1919. This number seems to be an especially valuable one. Every article in it deals with matters of vital importance to mothers and children.

If you have misplaced or overlooked this issue write to the Commissioner of Health, Dr. S. L. Jepson, Charleston, for a copy. It is to be highly commended.

THE COUNTY SOCIETY

Now that the heated season is over, we must begin to plan for the activities of the local societies for the coming months.

Many of these organizations have not yet gotten reorganized since the demands of the emergencies of war were made upon them. It is time for us to "get going" again. Get the members together and get interest aroused.

Then send reports to the Journal for publication. You will note how very few County Society reports have appeared recently. It is because none have been received.

The local Secretary and the State Secretary can not make the local and state bodies a success unless the members get interested. In this regard let me call your attention to the number of men in your locality who are eligible to membership and yet are not affiliated. Call upon them and ask them to attend the next meeting with you and try to get their applications. Unless we all lend our efforts it will be very difficult to get the societies to their highest standard of efficiency.

BUSINESS IS BUSINESS

The medical profession should cease to give its moral support to the time-worn statement that the average income of a physician is $600 or $700 a year, and that the average physician collects but 35 to 50 per cent. of his earnings. These two statements may once have been true, but have not been true, we are sure, during the past decade. They, however, afford arguments for those who say that under compulsory health insurance physicians may be assured of an income of approximately $1,500 a year and collect 100 per cent. We must in this fight put up a bold front. We are law-abiding citizens, tax payers and statute supporters. Let us not be ashamed, then, to defend our economic rights. We may be a necessary evil, but never more needed than during the present war and the reconstructive days to come. We are not commercialized, nor do we propose to be socialized into a body of laborers. Let us expand; let us amalgamate and impress our will on our law makers, as always for the benefit of others, but this time including ourselves.—Pa. Medical Journal.

FEES

The above editorial, from a sister state Journal, seems to be apropos at this time when Old High Cost is hitting us so forcefully.

It appears that for some reason our profession labors under the handicap that we should expect nothing for services rendered except the appreciation of patients and a little money.

Various organizations in all other lines of human endeavor meet and fix the prices which will be demanded for their goods or services. Why should not physicians, through their organized associations, discuss these matters? Yet the questions of fees is "taboo" for the local societies.

Unions, some of them at least, of the various crafts have "unfair lists." Why should not the local societies of the medical profession have "dishonest and debt-dodging lists" as well. These questions can not but occur to our minds. Let us grant ours to be the finest and most altruistic of professions, yet there are the practical questions of food and clothes and a place to sleep, if we ever get the chance, and drugs and books and equipment and a vacation if we can get ahead a little.

As our editorial confrere says, "Business is Business," let us realize that ours is a business as well as a profession and demand our rights to charge for conscientious services faithfully performed. The plumber, the tinner, the

bricklayer, the machinist and so on tells us what he will charge for services. Why should we in our various "Locals," be barred from agreeing upon a scale as well?

Had you, Fellow Members, ever approached these questions from this angle? Think these matters over.

EXAMINATION QUESTIONS, JULY MEETING STATE BOARD OF MEDICAL EXAMINERS, FOR WEST VIRGINIA.

SPECIAL MEDICINE

1. Diagnose and treatment of membranous croup.
2. Etiology and diagnosis of glaucoma.
3. When should tonsils not be removed and why?
4. Give points on chest where four principal heart murmurs are heard.
5. Diagnosis and treatment of ethmoidal sinusitis.
6. Etiology and symptoms of locomotor ataxia.
7. Best method for detecting color blindness.
8. How would you determine malingering blindness of one eye?
9. Etiology and treatment of chronic cystitis.
10. Etiology, symptoms, signs and treatment of beginning hypertrophied prostate.
11. Method for detecting latent or quiescent gonorrhoea in male.
12. What are the remote causes of earache?

—V. T. CHURCHMAN.

OBSTETRICS AND GYNECOLOGY

1. Describe the proper management of the breasts before labor.
2. What is the proper treatment for a case of continued menstruation, during pregnancy?
3. What are the prodromata of labor?
4. State when a vaginal douche is indicated before, during, and after labor.
5. Describe the method of delivery of an adherent placenta at term.
6. What are the methods employed in obstetrics for the dilatation of the cervix?
7. What is the treatment of puerperal sepsis?
8. What are the diagnostic symptoms and signs of pelvic inflammation in the female and under what conditions would operation be necessary?
9. Describe Sims' position.
10. What are the symptomatic indications for curetage; give the steps of the operation.
11. What are the symptoms of cancer of the uterus?
12. Give in detail the method to be used in making an examination of the pelvis.

—J. L. PYLE.

SURGERY

1. What is pyelitis and give treatment?
2. Mention briefly your treatment for Colles and Potts fracture. What anatomical points are to be observed in reducing Colles?
3. Describe briefly the common symptoms of intestinal obstruction, and the best method of treatment.
4. Differentiate pyelitis, appendicitis, gall-stone colic, and stone in ureter.
5. Differentiate hemorrhage of brain,

acute alcoholism, uremia poisoning, opium poison, and appoplexy.

6. Give your treatment for old anterior dislocation of neck of humerus.
7. Give latest treatment for varicose ulcers.
8. What is the present general accepted theory of shock? What can be done to prevent its development after operations?
9. What are the symptoms of septic fever? How treated?
10. Differentiate between obstruction of common and cystic duct.
11. Name four (4) complications liable to occur in male suffering from gonorrhea.
12. Give symptoms of ruptured appendix and your technique in detail for operation.

—E. H. THOMPSON, Bluefield.

ANATOMY AND EMBRYOLOGY

1. What are the special characteristics of the left ventricle of the heart?
2. Give the origin and course of the pulmonary artery.
3. Name the branches of the abdominal aorta.
4. Give the origin, insertion, and action of the rectus abdominis muscle.
5. What bones form the orbital cavities?
6. Name the ligaments of the ankle-joint.
7. Give an anatomic description of the bronchial tubes.
8. Name and locate the regions of the abdomen.
9. Describe the development of the heart.
10. Describe the development of the stomach.
11. Give the embryology of the spinal cord.
12. Give the embryology of the femer bone.

J. L. PYLE, Chester.

BACTERIOLOGY AND HYGIENE

1. Name the culture media and describe methods of preparation.
2. Give the effects of physical and chemical agents on bacteria.
3. Discuss pathogenesis.
4. Describe the characteristics of the typhoid bacillus and give its distribution in nature.
5. Describe the tubercle bacillus and state the relation between bovine and human tuberculosis.
6. Name the diseases spread through alvine discharges and give prophylaxis.
7. Discuss milk in its relation to disease.
8. What are the essential features of a sanitary privy? Describe the construction of one.
9. (a) What are the benefits of fresh air? (b) the effects of vitiated air?
10. Describe the medical prophylaxis of venereal disease.
11. Describe the hygienic management of tuberculosis.
12. Name the diseases incident to the common drinking cup. (b) The common towel. (c) Give substitutes for each in public places.

—W. T. HENSHAW.

PHYSIOLOGY AND HISTOLOGY

1. What physical and chemical changes result from the contraction of muscle?
2. Describe histological structure of cerebral cortex.

3. What is the function of the ganglion on posterior spinal nerve root?
4. What factors influence the circulation of the blood in health?
5. What is the auriculo centriculor bundle? Its function?
6. Give the origin, structure, and function of the red cells.
7. What is the difference between the inspired and expired air?
8. Give the composition and function of gastric secretion.
9. What conditions influence the secretion of urine in health?
10. Compare sweet glands and kidneys as excretory glands.
11. Compare structurally serous and mucous membranes.
12. Describe a lobule of the liver.

—H. E. SLOAN.

PRACTICE OF MEDICINE AND PEDIATRICS

1. Give etiology of non-specific acute arthritis and give common location of focus.
2. Differentiate lobar and bronchial pneumonia. Give treatment for both.
3. Differentiate between gastric and duodenal ulcer.
4. Give symptoms of acute endocarditis.
5. Give treatment for acute nephritis.
6. Give symptoms and treatment, medical and dietetic, of typhoid fever; differentiate it from appendicitis.
7. Give your treatment for influenza; mention most common complications, and give your treatment briefly for same.
8. State symptoms and early diagnosis of hip joint disease.
9. What is chorea? Give treatment for child seven years of age.
10. Give symptoms, diagnosis and treatment of scarlatina.
11. How much antitoxin would you give a child three years old for membranous croup?
12. Give your treatment for gastroenteritis fever in an infant.

—E. H. THOMPSON.

CHEMISTRY AND MEDICAL JURISPRUDENCE

1. Enumerate four elements that enter into the formation of most organic bodies.
2. Differentiate between the terms analytic and synthetic as used in chemistry. Explain by example.
3. Differentiate between metals and non-metals.
4. Produce sulfuretted hydrogen chemically.
5. Enumerate the various tests used for the detection of sugar.
6. What antidote would you employ in case of poisoning by silver nitrate? Why?
7. Treat a case poisoning by (a) strychnin, (b) atropin. Give the chemical and physiological antidote for same.
8. What is the composition of (a) Dover's powder? (b) Tully's powder?
9. What gives color to the blood, and what metallic element enters into its composition?
10. Legally has the pharmacist the right to refill a prescription bearing your signature, without your consent?
11. Differentiate between a suicidal and homicidal gun-shot wound?
12. Give the formulae for (a) sodium chloride, (b) acetic acid, (c) sodium sulfate, (d) sulfurous acid, (e) rain-water, (f) sodium carbonate, (g) ammonium chloride.

—H. E. GAYNOR.

State News

Dr. P. L. Gordon has recently been discharged from Army Service and has re-opened his office in Charleston. Dr. Gordon held a commission with the rank of Captain and had several months of overseas service.

Dr. S. H. Phillips, who has been on duty for some time as Captain in the Medical Corps in the Base Hospital at Camp Meade, has received his discharge and has returned to his old location in Charleston.

Dr. John E. Cannaday has resumed civil practice in Charleston after an absence of several months, spent in Army Service. Major Cannaday was stationed for some time at Base Hospital, Camp Sherman, where he was chief of the Surgical Service.

Dr. J. A. Arbuckle, formerly of Elkins, W. Va., has located in Charleston, where he is practicing the specialty of eye, ear, nose and throat.

Dr. Stuart McGuire, of Richmond, is now president of the Medical College of Virginia.

Maj. Claude C. Coleman, of Richmond, who has filled the position of chief of the Neuro-Surgical Service at General Hospital No. 11, Cape May, N. J., since January, has been transferred to General Hospital No. 41, Staten Island, N. Y., as the Cape May Hospital is to close this month.

Dr. Joseph E. Seebert, formerly of Tamroy, W. Va., after two years' service with the British Army, has located in Lexington, Va. In June, he was married to Miss Frances Kirby Brown, of New York.

Title page and index for Vol. 12, (1917-18) is requested. Send same to Editor of Journal.

Dr. I. W. Mayberry, who has been in Army Service for the last two years, has opened offices in Huntington and will be associated with Dr. J. Ross Hunter. Dr. Mayberry was formerly of Lawrence county, Ohio.

Drs. K. C. Prichard and E. E. Rose, who recently returned from overseas service, have resumed their practices in Huntington.

McBEE-WRIGHT

At Keyser, W. Va., Thursday, August 14, at 8 p. m., at the home of the bride and in the presence of only the immediate families, Dr. Thomas Judson McBee, of Morgantown, W. Va., and Miss Norma Mildred Wright, daughter of Mr. and Mrs. Harry Camden Wright, were married. Dr. McBee is a well known physician and surgeon of Morgantown.

Miss Wright has been a prominent teacher in West Virginia, and for three years was instructor at Jacob Tome Institute at Port Deposit. She was one of two girls selected from West Virginia by General Federation of Woman's Clubs to go to France and served some months in Brittany Leon area for the United States Army, where she was very successful as an entertainer.

Dr. P. B. Barringer, of Charlottesville, Va., prominently known in that state as a physician and educator, conducted a series of lectures in Williams-

burg, Va., under the auspices of the summer school. The special aim of these lectures is to secure the co-operation of the teachers of Virginia with the State Board of Health in their attempt to better health conditions, especially in the rural districts.

The doctors of Paris have decided that they will double their pre-war charges for day visits and treble them for services at night. It is also announced that an organization has been formed with the purpose of establishing permanent relations between American and French physicians and surgeons.

One of the commissions of this organization will have in charge the establishment of a course of teaching for American physicians visiting France; another the founding of a bureau of information; and a third will examine into means of organizing an exchange of articles on medical and surgical subjects between the journals of the United States and France.

Dr. Robert Buford, of Sheltering Arms Hospital, Hansford, was a recent visitor in Huntington.

Dr. and Mrs. J. H. Steenbergen, of Huntington, motored to Baltimore and other eastern cities during August.

Dr. W. W. Point, major in the M. C., of Charleston, has returned from overseas service.

Dr. C. R. Enslow and wife, of Huntington, spent two weeks at Lake Chautauqua, N. Y., in August.

Dr. A. W. Adkins, of Griffithsville, has located in Huntington for the practice of his profession.

NEWS ITEMS

BELGRADE.—Captain John C. Hancock, of Waynesboro, Virginia, a descendant of a noted hero of Revolutionary days in America, has been decorated by the Serbian government in recognition of his services with the American Red Cross Commission.

Captain Hancock, upon whom the Order of Saint Sava has been conferred, has spent the past six months in northern Serbia. He has established several important Red Cross relief stations at different points and personally supervised the distribution of large quantities of food and clothing.

Miss Cara Crosley, of Accomac, Virginia, has been honored with a Serbian decoration, the "Cross of Mercy." Miss Crosley has done excellent work at Lescovats, where typhus broke out in a Bulgar prison camp and threatened to spread through the surrounding district. With the aid of two other nurses, Miss Crosley supervised the disinfecting of all the prisoners, their clothing and their barracks. The sick men were isolated in a hospital, new clothes and blankets furnished by the Red Cross and the epidemic checked.

CONFERENCE OF WOMEN PHYSICIANS

Women physicians will gather in New York beginning September 15th for a six weeks' international conference under the auspices of the Social Morality Committee, War Work Council, of the National Board of the Young Women's Christian Association. Social problems affecting women throughout the world will be studied, and representative non-medical women will be invited to join the group. The conference will be divided into three divisions: Health, the psychological aspects of the

sex question, and legislative measures as they reflect the present status of sex morality. To date thirty prominent women physicians from all parts of the world are reported to have accepted invitations to be present.

MEDICAL VETERANS OF THE WORLD WAR

An organization known as "The Medical Veterans of the World War," is being formed with most commendable objects. Its scope is best known by the preliminary articles of the By-Laws.

Article 1.—Title. The name and title of this organization shall be The Medical Veterans of the World War.

Article 2.—Object. The object of this Association shall be to perpetuate fellowship, to prepare history, secure cooperation for the mutual benefit of the medical men who served in the World War, 1914-1918, and for the mutual improvement and social intercourse of its members.

Article 3.—Classification for Membership.

Section 1.—The members of this Association shall be divided into two classes: (1) members and (2) associate members.

Section 2.—The following persons shall be eligible to membership in this Association:

1. All medical officers, contract surgeons of the United States Army and acting assistant surgeons of the United States Public Health Service, who have served in the Medical Corps of the United States Army, United States Navy, and United States Public Health Service.

2. All medical members and medical examiners of Local, Medical Advisory, and District Boards, officially appointed by the President of the United States, the Provost Marshal General of the United States Army, and the Governors of the various states.

Section 3.—The following persons shall be eligible to associate membership in this Association:

Members of the Medical profession of Allied nations who have been in the service of their governments during the World War.

Section 4.—Associate members shall enjoy all the privileges of membership except the right to vote at the annual meeting.

The temporary President is Dr. Hubert Work, Speaker of the House of Delegates of the American Medical Association.

According to a letter received from Dr. Alexander R. Craig, Secretary, the organization has the sanction of the American Medical Association.

Medicine

INCOMPATIBILITY OF QUININE AND ASPIRIN

Dr. Saenz de Santa Maria Y. Marron, writing in *El Siglo Medico,* relates that during a year's experience in the use of aspirin he has learned that the combination with quinine is an undesirable one. In giving remedies in combination we expect synergism in action, a result superior to that obtained by uncombined use. Failure to obtain a heightened effect is itself sufficient to do away with the combination. But in such combinations we may get failure of a higher type—either refusal of one remedy to act or else actual untoward result of some kind. The writer states that his expectation was often defrauded, and cites examples. There was one patient who was getting 25 cgms. of each drug

three times daily, and who showed on the following day a severe tachycardia, restlessness, and adynamia. The case was one of influenza, in which in the author's experience, the heart frequency is by no means unduly great, by reason of some action by the grip toxin on the vagus. The possibility of an idiosyncrasy was dashed by noting analogous behavior in a series of other cases. The problem was taken to the pharmaceutical laboratory, and the evidence appears to show that under the catalytic action of aspirin in the stomach or blood the quinine was changed to a toxic derivative which was termed quinotoxin. This latter, an insomer of quinine, appears to be known to chemists, and it has the reputation of being able to cause death. The brevity and vagueness of the article prevent a complete visualization of the author's notions on the subject, but he is opposed to polypharmacy on the principle that while one remedy may potentize another in some cases, there is also a danger that one remedy can denature another into a toxic substance. The lessons are plain, for every alleged synergistic combination must have this possibility excluded before use on man, and new substances must not be carelessly mixed with old ones.—Medical Record.

THE ARGYLL ROBERTSON SIGN

Rasquin and Dujardin assert that the discovery of the Argyll Robertson sign calls at once for making out the balance sheet as regards syphilis. It may be the only sign of the disease and the patient may not be aware that he has it and may feel perfectly well. Nevertheless he must be told of the danger in which he stands, and the urgent necessity for treatment must be impressed on him as the only chance for him to escape some severe nervous affection, general paralysis, for example. The balance sheet can be drawn with great precision nowadays by the data obtained from examination of the blood, spinal fluid and the reaction to luetin. We can thus form a kind of biologic formula which can be compared with the typical formulas of the principal syphilitic nervous affections, and thus foretells the outcome. If the Bordet-Wassermann test of the blood is negative, reactivation must be tried. If this is negative, then lumbar puncture must be done, and only when all of these give a negative response are we justified in keeping the patient merely under surveillance. When the findings in the spinal fluid are seen to be exactly like those with grave nervous affections, the patient becomes convinced of the desirability of treatment. These old forms of syphilis are often very slow in responding to treatment, even quite active. As the reactions return to normal under treatment, the patient will understand better and will submit more docilely to our therapeutic efforts. By comparing the biologic formulas from time to time we can supervise conditions as they improve and further convince the patient of the wisdom of thorough treatment.

EYESTRAIN

C. P. Emerson, Indianapolis (*Journal A. M. A.*, June 21, 1919), while mentioning the former diagnoses of neurasthenia, etc., which were so commonly made, calls attention to eyestrain in persons whose original nervous makeup is such that this strain alone can at least modify a syndrome due primarily to some other injuring factor. He would not advertise it as the sole cause, and the real origin is more likely to be in

the neuropathic constitution of the patient, himself. Many are greatly relieved by proper correction of errors of refraction, but they cannot be helped by the ophthalmologist alone any more than they can by the internist independently. The symptom of eyestrain of which one hears the most is headache. Headaches of nasal origin or intracranial disease are excluded. The direct or simple headache with pain in or near the eyes following close eye work are recognized, but the more complex ones, which might seem to depend more on gastrointestinal causes, need careful study. They are acute diseases, as much as pneumonia or malaria chills and are due to a chain of causes for which the patient, himself, but not the eyestrain, is to blame for the paroxysms, which may be considered as defensive crises like the crises of a type peculiar to the patient's nervous constitution. The definite cause is often other than the eye. The eyestrain is a continuous one, but spells of headache come on at intervals. How to explain the infrequency of headaches due to a continuous cause would be difficult if they were the direct result of such causes. The eyestrain need be no more marked during a menstrual period or constipation when the patient suffers. There are many individual differences, but there are some characteristic differences from other kinds of attacks. In the eyestrain headache, the pain is superficial, the patient is hyperesthetic, there is usually demonstrable in nasal headache slight mental reduction which is not observed here. Reflex phenomena are common, and cerebral symptoms and trophic changes may occur. Children practically never have such, nor are they present after presbyopia is well developed. They begin and end together with functional activity of the ciliary muscle. In addition to the headaches we can observe other phenomena which are equivalent. They may occur at any age, but they appear mostly in childhood. Such are the causeless attacks of temper which Emerson considers headache equivalents, and are usually accompanied with duller pain or psychic depression. In a few cases proper glasses will relieve the condition, and still oftener lessen it. Headaches, however, are not the most common or most important results of eyestrain. Train-sickness, sea-sickness to a certain degree, vertigo, hypersensitiveness to certain colors are mentioned as other examples. Lastly, the eye is actually a part of the central nervous system, and may be the cause of some mental troubles. It may help to explain some phobias such as agoraphobia, which may be helpful in treating some cases in crowded cities. Another mental feature in which eyestrain may make itself felt is in the realm of dreams; dreams of falling, etc. One patient, whenever her glasses needed correcting, would be aware of it from her disagreeable dreams. Emerson speaks here, also, of family or inherited headaches. He says that the anatomic conditions that lead to eyestrain certainly are sometimes inherited. Ophthalmology has become such a specialty that many persons go direct to the oculist that might better see that family physician. Sight is often dearly paid for and the eye muscles are small but they may cause great fatigue. To judge of the normal vision of an individual needs very careful refraction study, and he says ophthalmologists are often remiss in reporting to the patient's doctor, as to all the conditions. The competent ones treat the eyes with optical instruments and claim to do nothing more. It is fundamental that all the

error should be determined before its correction is attempted, and this requires complete analysis of the accommodation for the time. The ophthalmologists who have helped us most always begin with a careful retinoscopic examination to get the general lay of the land and guard against any gross error that the patient has learned to suppress. They insist that the distance of the patients in the retinoscopy should be accurately measured and not merely estimated. They use the subjective tests to confirm the result. Then comes the question of muscle balance, muscle strength, ciliary hypertrophy, etc. He begs the ophthalmologist not to fatigue the patient too much and to allow the internist some voice. In the case of the average patient the ocuist may follow some general rules with average results, but the internists have examined them as individuals and not as seeing mechanisms. The paper ends with a plea for ophthalmologists to cooperate with the physician. Cannot he and the ophthalmologists talk over the patient and together decide on the correction?

NAUSEA AND VOMITING OF PREGNANCY

A group of symptoms affecting the pregnant woman and varying in severity from mild "morning sickness," through a range of more intense nausea, to the extreme of "pernicious vomiting" presents difficulties that are not always easy to combat. The theories advanced in explanation of the origin of these phenomena are unsatisfactory because most of these theories bear on symptoms that are at best only part of the possibilities presented by this particular type of nausea and vomiting. Acidosis, for example, which has been one of the explanations offered in the past, fails to account for the features observed in many instances. The hypothesis of "suboxidation" has not justified itself in attempting to explain these, as well as various other, pathologic disturbances. The hypothetic poison has not been discovered. The alleged accumulation in the blood of nonmetabolized nitrogenous compounds, such as amino-acids, has not been substantiated. As recent writers have summarized the situation: "Neither from the point of view of cause or cure has any satisfactory solution of the problem of nausea and vomiting or prenicious vomiting been arrived at. Rest in bed, forced fluids, attention to excreta, diet, and control of the nervous system by the use of mild and strong sedatives, appears to be the most commonly adopted procedure for this condition."*

There are various indications that point to the dominance of some metabolic factor in the origin of both the mild and the severer types of the nausea and vomiting of pregnancy. The symptoms appear most frequently in the morning after refraining from food for some time. Moreover, the common simulataneous occurrence of a ketonuria is an added indication of a metabolic upset. This symptom is usually observed when the supply of actually utilized carbohydrates is low, for example, when sugars fail to be oxidized, as in diabetes. shortage of physiologically available carbohydrate, usually expressed in the glcogen supply of the tissues, frequently leads to infiltration of the liver with

---

*. Cuncan, J. W., and Harding, V. J.: A Report on the Effect of High Carbohydrate Feeding on the Nausea and Vomiting of Pregnancy, Canad. M. A. J. 8: 1057 (Dec.) 1918.

fats. Present-day physiologic evidence points to this phenomenon as an indication of carbohydrate starvation in the body. Fat is not deposed in the liver while carbohydrates are still available. In the liver, says Lusk, there is an antagonism between glycogen deposit following carbohydrate ingestion and fat deposition.

Mottram[2] has observed that in the pregnancy of ill-nourished animals, the liver may become overloaded with fat, just as is true in certain stages of inanition. In view of all these symptomatic similarities Duncan and Harding[1] of McGill University Faculty of Medicine, Montreal, have argued that these two factors, pregnancy and a short period of hunger, might account for the periodicity of morning sickness, and that the metabolic factor here concerned is a temporary relative sack of glycogen in the liver. Such a condition, they add, leads to a fatty infiltration of that organ.

The obvious practical conclusion that follows from this hypothesis is to preserve or enrich the supply of available carbohydrate for the patient. This is by no means a new procedure. Despite the current indifference to such a plan, the Canadian investigators have given renewed consideration to it. They have endeavored, in cases of varying severity of nausea and vomiting in pregnancy, to correct the assumed deficiency of carbohydrate supply by administering glucose or lactose, but mainly the latter, and they have supplemented this by a high carbohydrate diet. Duncan and Harding insist that psychologic advantages are not responsible for the good results which they have observed after such treatment. The gratifying report of success in more than seventy cases furnishes a justification for calling attention anew to what is at least a simple procedure in dietotherapy.—Ed. Journal A. M. A., Aug.

TOXIC MANIFESTATIONS OF ARSPHENAMIN

The death of the patient which has been observed in some instances to follow the administration of arsphenamin has occasioned much concern to those who are compelled to administer this potent drug in human therapy. Among the symptoms observed in these cases of acute collapse are dilation of the heart and a fall in systemic blood pressure. So far as can be learned from animal experiments, there may be increased pulmonary blood pressure. The reaction of the internal organs seems to be variable. The occasional toxicity of preparations of arsphenamin has been attributed to intermediary compounds employed or arising during the process of manufacture. A number of these have been tested experimentally at the Hygienic Laboratory of the U. S. Public Health Service. The report is that they are not very poisonous and cannot account for the variable toxicity of different samples of arsphenamin which may or may not contain traces of one or more of them.[3] The possibility that the acute reactions often seen after arsphenamin administration in the clinic may be attributable to precipitates forming in the blood stream has also

---

1. Interallied Fellowship in Medicine, J. A. M. A. 72: 588 (Feb. 22); 742 (March 8); 1388 (May 10) 1919.
2. Graduate Medical Education in London, J. A. M. A. 72: 1478, 1484 (May 17) 1919.
3. Jackson, D. E., and Smith, M. I.: An Experimental Investigation of the Cause of Early Death from Arsphenamin, and of Certain Other features of the Pharmacologic Action of the Substances, J. Pharmacol. & Exper. Therap. 12: 221 (Nov.) 1918.

been suggested by several investigators; but it receives no support from the government pharmacologists. They charge the reaction to the alkalinity of the solutions used for injection and to the specific action of the arsphenamin itself. Wherever the real explanation of the unexpected toxicity may be proved to reside, the management of the symptoms of collapse is a question in practical therapy. Epinephrin has commonly been employed to combat the condition. Jackson and Smith [3] are, however, inclined to recommend a trial of tyramin in suitable cases. Hewlett[4] has already employed it as a blood-pressure raising substance in hypodermic doses of 60 mg. (1 grain). The systemic pressure dose not rise so high and the danger of acute dilatation of the heart is not so great as with the intravenous injection of epinephrin, according to Jackson and Smith, but the effects of tyramin are much more lasting. These investigators are extremely cautious in their advice, however. While they are by no means sure that the use of the drug might in any degree decrease the number of fatalities that from time to time occur under the use of arsphenamin, yet in their own words, they believe it is more logical and more likely to be of real value in these cases than is any other drug with which they are acquainted. The conclusion is far from convincing; but when a real danger exists, every reasonable prospect of averting it deserves some serious consideration.—Jour. A. M. A., June 14, 1919.

4. Hewlett, A. W.: The Action of Tyramin on the Circulation of Man, Arch. Med. 21: 411 (March) 1918.

USE OF INFLUENZA VACCINE AS A PROPHYLACTIC

An experimental study was conducted by the Massachusetts State Department of Health to show the necessity of properly controlled experiments to determine the value of a prophylactic remedy during an epidemic. A report of this work is made by Hinton and Kane. The vaccine used consisted of two strains of influenza bacilli, obtained during the present epidemic, one strain being recovered at necropsy and the other from the nose of an infected patient. These organisms were grown on blood agar for from sixteen to twenty hours, suspended in salt solution and heated to 55 C. for twenty minutes. One cubic centimeter of the vaccine contained approximately 800 million organisms. The vaccine was given intramuscularly, at twenty-four hour intervals, into the deltoid and triceps muscles. The injections were 0.5 c.c. on the first day, 1 c.c. on the second day and 1.5 c.c. on the third day. Children under 12 years of age were given one-half these quantities. The results obtained were entirely negative. The work was done in an institution in which influenza had not yet made its appearance, the Monson State Hospital for Epileptics, representing a small colony of individuals ideally suited for the purpose of this experiment. Approximately half of the patients were vaccinated, and as far as possible this was done by vaccinating a patient in every other bed of a ward or room. Careful records were kept on 225 patients aged from 4 to 70 years, as to the local and constitutional reactions of the vaccine. No reaction was noted in 184; twenty-six had headache and vertigo; fifteen had cough and coryza. In addition to the forty-one patients who gave reaction, eight gave severe reactions

with all of these symptoms. In spite of the fact that the number of injections and the quantity of each injection was the same for each vaccinated individual in this institution, constitutional symptoms were relatively no more frequent in the young than in the older patients. Forty-one patients showed mild constitutional symptoms of influenza, consisting of rise in temperature or nausea or vomiting or coryza or headache. The duration of symptoms was for twenty-four hours or less. The constitutional reaction almost invariably occurred within an hour or so after the second injection. Among the tuberculous patients, the constitutional effects of the vaccine, as far as could be noted, differed in no way from those without this pulmonary complication. In tabulating the results of the epidemic, it was noted that some of the patients having the severest reactions from the vaccination developed influenza, although the interval was from four to thirty-six days after receiving the vaccine. Therefore, the reaction from vaccination did not indicate the susceptibility of the individual to infection, neither did vaccination have any demonstrable effect on the course of the disease. Although the patients consisted almost entirely of epileptics, influenza seemed to have no effect on the number of seizures of infected individuals. In addition to the experimental study carried on in Monson State Hospital, the same influenza vaccine was used for prophylaxis in other state institutions. For one reason or another, no conclusive proof as to value of the vaccine as a phophylactic could be obtained in any of them.

HOFFMAN'S DROPS AS A BEVERAGE

The advent of prohibition will bring with it many interesting phases of the question, What is an intoxicating beverage? Most of the statutes refer to alcoholic intoxicatin specifically and in the popular speech intoxication is construed as meaning inebriation produced by alcohol. But a very similar form of intoxication is produced by many other drugs of a similar nature. Occasionally the ether addict is met with and even the lighter petroleum distillates have been used as an intoxicant. A case was recently tried before a police judge in Missouri where compound spirit of ether, or Hoffman's drops, were used producing profound intoxication. In this case it appears that a Swede purchased from a druggist and drank two ounces of Hoffman's drops, becoming intoxicated as a result. The dose of this preparation is half a teaspoonful. The authorities state that an overdose is likely to produce vomiting and death. Two ounces is certainly a overdose and might cause death in one not habituated to its use.

The result was ethereal, not alcoholic, intoxication and the druggist who had been charged with the sale of alcohol "so adulterated or compounded as to make it potable as a beverage" was discharged. The judge, however, gave notice that further sales of Hoffman's drops without a physician's prescription would be looked upon by him as illegal. If the principle is adopted that the sale of any substance that produces intoxication is forbidden under the prohibition laws it will be necessary for the authorities to issue more definite instructions for the guidance of the public as to what is an intoxicating substance.

STERILIZING ACTION OF FORMALDEHYDE VAPOR

Barthelemy and G. Gross a*Bulletin de l'Academie de madecine,* April 8, 1919) refer to the marked extent to which formaldehyde sterilization was employed in war surgery. They report laboratory experiments tending to justify the increasing confidence placed in this method. Filter paper was impregnated with various germs and then subjected to formaldehyde vapor either for twenty-four hours at room temperature or for three quarters of an hour at 40° C. The germs used were the staphylococcus aureus, the diphtheria and the typhoid bacillus, anthrax and subtilis spores, and dried tuberculous sputum. At the higher temperature all the germs were killed by the formaldehyde, but at ordinary temperatures the spores were not destroyed, and the tuberculous sputum induced in one month in guinea-pigs characteristic lymphatic enlargements containing caseous pus and yielding typical tubercle bacilli. In spite of the authors' extended experience with formaldehyde sterilization at ordinary temperature, which procedure they found efficacious for uninfected articles, they believe it should be given up in favor of the 40° C. method, which saves much time and is no more destructive to perishable materials than the first procedure. The following prerequisites are indispensable for successful results: The articles should not be placed in the sterilizer until thoroughly cleansed, freed of fatty material, and dried. Space for diffusion of the vapor between them should be allowed. An air-tight sterilizer should be employed. Trioxymethylene, if employed, should be used only in the powder form. Formaldehyde sterilization constitutes an efficient substitute for the steam autoclave where the latter is often unavailable.

Surgery

BONE TRANSPLANTS FROM THE TIBIA TO THE LOWER JAW

Dr. Charles A. Powers, of Denver, had done eleven of these operations at the American Hospital at Neuilly in France. Of these eleven cases, eight, or seventy-three per cent., were fully successful, three or twenty-seven per cent. complete failures, while one case, nine per cent., was undetermined, but a probable success. However, dividing these eleven cases into classes by years, it was found that of the five cases done in 1916 two cases, forty per cent., were successful and three cases, sixty per cent., unsuccessful: while of the six patients operated upon in 1917 (after wider experience) five cases, or eighty-three per cent., were full successes (solid bony union, good mastication, excellent approximation of the dental arcades) and one case, seventeen per cent., undetermined but probably successful. The results were, therefore, but moderately successful in 1916 but were fully successful in 1917 (no operations were done by the author in 1918 owing to the changed conditions, the Militarized American Hospital No. 1 becoming an evacuation hospital for the American wounded). The author gave in detail his operative technic (with dentist's cooperation), which he had worked out.

Doctor Powers stated that transplants to the lower jaw, in these battle casualties, had not found favor among the French surgeons and but moderate employment by the British surgeons. He

felt that while this series of eleven cases was not large, yet with the experience of the first year of work as a guide, the results in the second year had been most successful and satisfactory. Useless jaws had been returned to usefulness. Complete control over a very long period of time was absolutely necessary, and this obtained in the military service. Doctor Powers stated that the operation is a difficult one, through the proximity of the field to the mouth and nose, that it requires the best of detail and best of assistance in every way. The slightest infection is practically always fatal to success. (The author's failures were due to infection.) He stated that the operation as worked out by him was not necessarily the best possible, but that in view of his 1917 successes (five complete successes in six cases, the other a probable success), it was the best of which he knew at that time.

REPORT OF EIGHTY-TWO KNEE JOINT WAR INJURIES WITH A DISCUSSION OF THE WILLEMS TREATMENT.

Dr. Clarence A. McWilliams, of New York, and Dr. William B. Hetzel, of Pittsburgh (by invitation), in this paper made a plea that the old immobilization treatment be discarded for the Willems immediate, continuous, active mobilization procedure. In thirty-two of the eighty-two patients no fracture was present; in eight there was simple fracture; in the remaining forty there were combinations of comminuted fractures; fifty-seven cases, or sixty-eight per cent., remained clean. In only six cases were the joints drained. In thirty-six of the clean cases nine patients had perfect function finally; three were ankylosed; in twenty-four there were varying degrees of motion. Seventy-three patients become infected, of which four finally became ankylosed; one was resected; three had amputations; four patients died of the infection; one had flexion of 90° while the results in three were unknown. Compared with these melancholy results of immobilization the statistics of Willems in one hundred knee cases, eighteen of which became infected, showed no deaths and no amputations; one resection, and two stiff joints. In the authors' cases nine patients had died. The authors believe that no joint should be evacuated within ten days after operation, that the joints should be completely closed at operation, that no splint should be used after operation, except where fragments would otherwise be displaced. They advocate that the Willems' after treatment of immediate, continuous, active mobilization be continued day and night in both aseptic and septic joints. In their opinion there should be in every hospital a day and a night nurse to see that these motions are carried out.—N. Y. Med. Jour., July 19, 1919.

WHAT WOULD BE THE BENEFIT TO THE CIVILIAN SURGEON IN THE EXPERIENCE GAINED BY OUR MILITARY SURGEONS IN THE RECENT WORLD WAR?

Dr. Edgar A. Vander Veer, of Albany, in this paper said that early in the war the attempt at aseptic technic had broken down and that the system of treatment of fractures by the Allied surgeons had revealed great confusion. In the treatment of wounds army surgeons had been obliged to return to antiseptic methods and such experiments had led some British surgeons to abandon almost entirely the use of strong germicidal solutions, finding that sterile water alone maintained satisfactory

healing conditions. While the Carrel-Dakin method had accomplished much Doctor Vander Veer felt that it was an expensive, painful, and somewhat protracted form of treatment. The antiseptic treatment, however, had been employed to a great extent in the third and fourth years of the war. Reference was made to the excellent system of transportation which had been developed and to the short history accompanying the patient, both of which had spared the patient much suffering. The standardization of splints in the treatment of fracture had been of great benefit and their proper application, with the use of tetanus antitoxin, had in the author's opinion lowered the mortality. Ether and chloroform he believed would continue to be the most trustworthy anesthetics.—N. Y. Med. Jour., July 19, 1919.

OPERATIVE TREATMENT OF EMPYEMA

B. F. Stevens (*Southwestern Medicine,* May, 1919) considers that the method used at Camp Travis is the most rational he has seen. A simple puncture was done under novocaine with a trocar, a large catheter was introduced through the trocar and the latter withdrawn. The muscles and pleura contracted on the catheter, making an airtight connection, and through this a few ounces of pus were allowed to run out at the time of operation and every two hours afterward. When all the pus was out, Dakin's solution was instilled every two hours, day and night, and as the catheter was clamped off in the interval no air was allowed to enter and contract the lung. The pus was gotten rid of in from three to ten days and the entire treatment averaged not more than three weeks. Dakin's solution must be fresh to get results, and any one can make it by running chlorine gas from a cylinder through a five per cent. solution of sodium carbonate. Its antiseptic effects last about half an hour, so frequent instillations are necessary.

THE GUILLOTINE AMPUTATION; AN UNFORTUNATE RESURRECTION.

Dr. John H. Gibbon, of Philadelphia, gave as the reason for the designation given this form of amputation the frequent secondary hemorrhages, slow healing, the painful dressings and the numerous secondary operations following the no flap amputation. These complications were in his opinion obviated by the reflected skin flap amputation. The additional time required for making the reflections of the flap, he said, occupied but a few minutes and could not add to the shock. As soon as the wound had become clean the flaps were in readiness to cover it; whereas, in the no flap method a second operation or the employment for a number of weeks of some appliance to draw down the skin was necessary, and in many instances such efforts failed. While one reason given for doing the no flap operation was that it gave a good stump for the wearing of an artificial limb, in Doctor Gibbon's opinion the reflected skin flap amputation gave exactly the same kind of stump, gave it earlier and with less pain and danger. Were this not true, then the guillotine amputation was to be employed in civil practice, which procedure he doubted any one would be willing to inaugurate.—N. Y. Med. Jour., July 19, 1919.

SPINAL CORD SURGERY

Dr. Ernest Sachs, St. Louis, in a paper on this subject, in the Missouri State Med. Jour., concludes by emphasizing the following points:

1. Spinal tumors are not as rare as has hitherto been supposed.
2. The recognition of the existence of a focal spinal lesion is comparatively easy.
3. The earliest symptom of a focal lesion is usually paresthesia and not pain.
4. Pain is not a necessary symptom for the diagnosis of a spinal lesion.
5. Laminectomy is a safe operation, but requires a special technic.
6. There are other spinal conditions than spinal tumors that may be relieved by operation.
7. Early operation in fracture of the spine with symptoms of complete transverse myelitis is, in my opinion, the wiser course.
8. Every focal spinal lesion should have an exploratory laminectomy.

CIRCUMCISION

By James Howard Heacock, M. D.,

New York, Former Chief of Staff, Volunteer Hospital, New York; Surgical Staff, St. Mary's Hospital; Surgeon, Northwestern Dispensary.

From a religious rite among the Hebrews and an early custom with the Persians, East Indians and early Egyptians, circumision has developed into almost a universal practice especially with the highly civilized races. Putting aside all sects and creeds and barring all sentiment on such delicate subject, there is not a matter that should be spoken of more often and urged on the public. Sex hygiene demands it, in fact it is not complete without frequently alluding to this one neglected question of personal care. Formerly mothers were wholly immune to suggestions along this line and even considered it an insult for a physician to say that her boy was not born normal and needed operative measures. Her answer was invariably, "No." Just as the old doctor resisted the theory of germs as the cause of disease, so it was with the good mother who failed to realize the benefit of such advice.

To carry on a propoganda through the Journal columns may seem offensive to the profession but the means to the end can not be accomplished without constant agitation.

The Gentile would do well to establish a precedent in this event and one of the greatest fields of preventive medicine would be covered, not only relating to disease but to cleanliness as well. As this problem must be solved, education as to the ease with which the operation can be performed, the slight danger from hemorrhage with ordinary care, and the great comfort it affords to the individual. In more ways than one the mothers get together and learn the new fads and fancies and they will astound you with their knowledge of asepsis and antisepsis; sterilization of the milk bottle; care of the rubber nipple and pasteurization or sterilization of the milk. Why is it not possible to teach them the proper hygiene of the genitalia?

How many young men today find that they are in need of circumcision on account of a marked phimosis, paraphimosis or a venereal sore or ulcer? Every surgeon has heard young men say, "I wish I had had this operation done when I was a kid," and rightly so too. However, criticism is not fitting when a lack of knowledge is at fault.

Universal circumcision as a hygienic measure would be out of the question at present. The public is not ready for it. It will take many years to educate the public to the necessity of circumcision.—N. Y. Med. Jour., July 19, 1919.

INJURY TO THE LIVER FROM CHLOROFORM ANESTHESIA

Delayed injury to the liver following chloroform anesthesia is an old problem among surgeons and has been reported officially since 1850. Much clinical and experimental effort has been directed toward the solution of this serious anesthetic complication. Davis and Whipple[4] present interesting data on the influence of fasting and various diets in the liver injury from chloroform anesthesia. After reviewing the experimental work on this subject with particular reference to Opie's work on rats in chloroform poisoning, they report some feeding experiments on young dogs and puppies, feeding them on special diets and starving some before anesthetizing the dogs with chloroform. During the chloroform anesthesia a laparotomy is performed and a part of the liver removed. The details of their experimental work are too extensive to comment upon individually and those interested are referred to the original article; but the conclusions of Whipple and Davis are of distinct value.

"Starved animals are all susceptible to liver injury from chloroform. The maximal injury is to be expected.

"Sugar, and diets rich in carbohydrates fed in the days preceding the cholorofrm anethesia exert a marked protective action against liver injury.

"Fat alone or in combination with food containing fat in large proportions induces a maximal amount of liver injury comparable to starvation.

"Beef extract has little protection in proportion to its actual food value.

"Skim milk and commercial casein or in connection with cracker are highly protective diets."

No single theory so far adopted will explain this therapeutic action of certain food substances against the liver action of chloroform anesthesia. It certainly is a reaction of the liver cells, not of substance circulating in the blood stream.

These facts should not be lost sight of in the management of any human cases in which chloroform is indicated. The patient should be given liberal amounts of carbohydrates and skimmed milk for at least two days preceding the anesthesia. It cannot be too often emphasized that it is most dangerous to give chloroform to men or animals whenever a fasting period has preceded the administration of the anesthetic.

COMMENT

Comment is hardly necessary on this work of Davis and Whipple as there is little doubt but that in children and in operations slight in character in which chloroform in greater or less amounts is used or indicated that the carbohydrate-milk diet preceding the chloroform anethesia will rapidly come into general use, and that the practice of fasting prior to the administration of the anesthesia will be discontinued. Davis and Whipple[5] in their second paper on the influence of drugs and chemical agents in liver necrosis and chloroform anesthesia come to other interesting conclusions. They take issue with Graham's theory that in the presence of water and

---

[5] Davis, N. C., and Whipple, G. H.: The Influence of Drugs and Chemical Agents on the Liver Necrosis of Chloroform Anesthesia. Paper II. Arch. Int. Med., 1919, xxiii, No. 5, 636.

oxygen in the body chloroform is split, that hydrochloric acid and carbon dioxid are formed, and that the hydrochloric acid kills a certain amount of liver parenchyma either by chemical action or by secondary asphyxia. Their conclusions from their experiments, considered from a practical standpoint, emphasize the value of epinephrin (adrenalin) and quinin as drugs which will to a great extent prevent liver necrosis following chloroform anesthesia, and they comment that "although chloroform is losing favor as an anesthetic, it is still employed extensively by some physicians. In view of the therapeutic use of such drugs as epinephrin and quinin, it might be well to call attention to the possible practical value of these drugs. In cases of perincious vomiting, for instance, it would be very dangerous to use chloroform because of the starved tissues, but it might be possible to lessen the tissue injury by means of the drugs mentioned. Epinephrin subcutaneously or intramuscularly in the days preceding anesthesia exert a distinctly protective action against chloroform injury.—Md. Med. Jour., June, 1919.

New and Nonofficial Remedies

During July the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

Abbott Laboratories: Barbital Sodium-Abbott.

Hollister-Wilson Laboratories: Ovarian Substance-Hollister-Wilson Desiccated Corpus Luteum-Hollister-Wilson.

Roessler and Hasslacher Chemical Company: Sodium Dioxide, Dental-R. and H.

Chlorcosane (McNeil).—A brand of chlorcosane containing from 35 to 40 per cent. of chlorine in stable (nonactive) combination. (For a discussion of the properties and uses of chlorcosane see New and Nonofficial Remedies, 1919, p. 137.) Robert McNeill, Philadelphia, Pa.

Dichloramine-T (McNeil).—A brand of dichloramine-T complying with the N. N. R. standards. (For a discussion of the actions, uses and dosage of dichloramine-T, see New and Nonofficial Remedies, 1919, p. 138.) Robert McNeil, Philadelphia, Pa.

Pituitary Solution-Abbott. — Liquor Hypophysis U. S. P. A sterilized solution of the water soluble extract of the posterior portion of the pituitary glands of cattle. It is standardized by the method of Roth. (For a discussion of the actions and uses of pituitary preparations, see New and Nonofficial Remedies, 1919, p. 204.) The Abbott Laboratories, Chicago.

Ampules Pituitary Solution-Abbott, O. 5. Cc.—Each ampule contains O. 5. Cc. pituitary solution-Abbott. The Abbott Laboratories, Chicago.

Ampules Pituitary Solution-Abbott, I Cc.—Each ampule contains 1 Cc. pituitary solution-Abbott. The Abbott Laboratories, Chicago.

Pituitary Extract-Lederle.—A sterile solution containing the active principles of the posterior lobe of the pituitary body. It is standardized by the method of Roth and has the strength of Liquor Hypophysis, U. S. P. (For a discussion of the actions and uses of pituitary preparations, see New and Nonofficial

Remedies, 1919, p. 204.) Lederle Antitoxin Laboratories, New York.

Ampules Pituitary Extract-Lederle, O. 5 Cc.—Each ampule contains O. 5 Cc. pituitary extract-Lederle. Lederle Antitoxin Laboratories, New York.

Ampules Pituitary Extract-Lederle, 1 Cc.—Each ampule contains 1 Cc. pituitary extract-Lederle. Lederle Antitoxin Laboratories, New York.

Antidysenteric Serum (Polyvalent)—Lederle.—(For a description of Antidysenteric Serum, see New and Nonofficial Remedies, 1919, p. 269, and for Antidysenteric Serum-Lederle, see The Journal, A. M. A., April 14, 1919, p. 1136.) It is also marketed in syringes containing 50 Cc. each, with sterile needle. Lederle Antitoxin Laboratories, New York.

Streptococcus Vaccine (Polyvalent)—Lederle.—(For a description of Streptococcus Vaccine, see New and Nonofficial Remedies, 1919, p. 291 and for other Lederle preparations see The Journal, A. M. A., April 19, 1919, p. 1136.) It is also marketed in 10 Cc. and 20 Cc. vials; in packages of four 1-Cc. vials containing, respectively, 50, 100, 200 and 400 million killed streptococci; and in packages of four syringes containing, respectively, 50, 100, 200 and 400 million killed streptococci. Lederle Antitoxin Laboratories, New York, (Jour. A. M. A., July 5, 1919, p. 35).

Tuberculin "O. T." (Lederle).—Old Tuberculin (see New and Nonofficial Remedies, 1919, p. 277). Marketed in packages containing a stated amount of tuberculin and sufficient diluent to make 1 Cc. as follows: Dilution A containing O. 1 Cc., Dilution B containing 0.01 Cc., Dilution C containing 0.001 Cc., Dilution D containing 0.0001 Cc., Dilution E containing 0.00001 Cc., Dilution F containing 0.000001 Cc. Lederle Antitoxin Laboratories, New York.

Tuberculin "B. E." (Lederle).—In addition to the forms previously described, New Tuberculin "B. E." (See New and Non-official Remedies, 1919, p. 280 and N. N. R. supplement, p. 10) is also marketed in packages containing a stated amount of tuberculin with sufficient diluent to make 1 Cc. as follows: Dilution A containing 0.1 Cc., Dilution B containing 0.01 Cc., Dilution C containing 0.001 Cc., Dilution D containing 0.0001 Cc., Dilution E containing 0.00001 Cc., Dilution F containing 0.000001 Cc. Lederle Antitoxin Laboratories, New York.

Tuberculin "B. F." (Lederle).—In addition to the forms previously described, Tuberculin "B. F." (see New and Non-official Remedies, 1919, p. 280 and N. N. R. supplement p. 10) is also marketed in packages containing a stated amount of tuberculin with sufficient diluent to make 1 Cc. as follows: Dilution A containing 0.1 Cc., Dilution B containing 0.01 Cc., Dilution C containing 0.001 Cc., Dilution D containing 0.0001 Cc., Dilution E containing 0.00001 Cc., Dilution F containing 0.00000 Cc. Lederle Antitoxin Laboratories, New York (Jour. A. M. A., July 12, 1919, p. 105).

Propaganda for Reform

Partola.—A physician reports that a patient taking Partola as a blood purifier is now in a rundown condition with discoloration of the skin and a craving

for the drug and that another patient took three tablets before going to bed, developed cramps and aborted the next day in her third month of pregnancy. Analysis indicated Partola to be tablets containing 2.64 grains phenolphthalein per tablet, sugar, starch and oil of peppermint (Jour. A. M. A., July 5, 1199, p. 55).

Commercial Therapeutics.—The Merrell Proteognens present another attempt to foist on the medical profession a series of essentially secret preparations whose therapeutic value has not been scientifically demonstrated. It is the old story of exploiting physicians through commercial pseudoscience, of trading on the credulity of the profession to the detriment of the public. Sir William Osler says the remedy against the commercial deomination of therapeutics is obvious: "Give our students a first hand acquaintance with disease, and give them a thorough practical knowledge of the great drugs, and we will send out independent, clear-headed, cautious practitioners who will do their own thinking and be no longer at the mercy of the meretricious literature, which has sapped our independence." Excellent! But must humanity wait a generation? Why not stop this evil at once? The American Medical Association has provided the means whereby this may be done, if physicians will only make use of it—The Council on Pharmacy and Chemistry (Jour. A. M. A., July 12, 1919, p. 109).

Tyree's Antiseptic Powder.—An advertisement appearing in the New York Medical Record contains a bacteriologic report on Tyree's Antiseptic Powder by W. M. Gray, M. D., Microscopist, Army Medical Museum, and Pathologist to Providence Hospital. Every person who sees this advertisement and is not familiar with the facts will naturally suppose that this report, written on the stationery of the Surgeon-General's Office, War Department, is a recent report. As a matter of fact, the report was issued January 3, 1890, nearly thirty years ago. Furthermore, the product that Dr. Gray examined was a differen substance from the present Tyree's Antiseptic Powder. All these facts were brought out in the Journal, A. M. A., May 17, 1919, yet the Medical Record persists in publishing this inherently dishonest advertisement without explanations or apology (Jour. A. M. A., July 12, 1919, page 129).

Protecting the Sick Soldiers.—The Council on Pharmacy and Chemistry, aided by the A. M. A. Chemical Laboratory, did a great work in investigating and passing on the many medicinal products offered to the Surgeon-General for the treatment of the sick soldiers in the hospitals and in the field. Fakes of every description were offered the government and it is a well known fact that no matter how fraudulent, how fakish, or how ridiculous the wares might be, their promoters were able to get political influence, even certain congressmen and senators being secured to help them. Automatically all medicinal preparations offered to the Surgeon-General were referred to the Council and thus many worthless preparations were barred from use by the government. It has been well said that our soldiers were better protected than our civilians; for while the government does not take any chances on the acceptance of useless if not worthless medicinal preparations, yet there are any number of doctors who fail to profit by the findings of the Coun-

cil on Pharmacy and Chemistry (Jour. Ind. State Med. Assn., July 15, 1919, p. 196).

Proteogens of the Wm. S. Merrell Co. —The Council on Pharmacy and Chemistry reports that Proteogen No. 1 (Plantex) for Cancer, Proteogen No. 2 for Rheumatism, Proteogen No. 3 for Tuberculosis, Proteogen No. 4 for Hay Fever, and Bronchial Asthma, Proteogen No. 5 for Dermatosis, Proteogen No. 6 for Chlorosis, Proteogen No. 7 for Secondary Anemia, Proteogen No. 8 for Pernicious Anemia, Proteogen No. 9 for Giotre, Proteogen No. 10 for Syphilis, Proteogen No. 11 for Gonorrhea, and Proteogen No. 12 for Influenza and Pneumonia inadmissible to New and Nonofficial Remedies because their composition is secret; because the therapeutic claims made for them are unwarranted; and because the secrecy and complexity of their composition makes the use of these preparations irrational. The Proteogens are said to be prepared "under the personal supervision of the originator, Dr. A. S. Horowitz," who also originated Autolysin (an alleged cancer remedy, exploited some years ago). At one time the advertising for Proteogen No. 1 (Plantex) gave the impression that this was essentially the same as Autolysin. A study of the medical literature revealed no evidence establishing the value of the Proteogens; in fact, no evidence was found other than that appearing in the advertising matter of the manufacturer. The range of diseases in which Proteogens are recommended is so wide as to make obvious the lack of scientific judgment which characterizes their exploitation. Considering the grave nature of the diseases for which Proteogens are recommended, the want of a rational basis for the method of treatment and the general tenor of the advertising, it appears safe to conclude that these agents do not represent any definite advance in therapeutics (Jour. A. M. A., July 12, 1919, p. 128).

Dr. Miles' Heart Treatment.—According to the Miles Medicine Company this is "a strengthening regulator and tonic for the weak heart." No information regarding the composition of Miles' Heart Treatment is vouchsafed by the manufacturer beyond the statement of the alcohol content (11 per cent.) as required by the law. However, quotations in the advertising suggest that the preparation contains digitalis and cactus. To determine the presence or absence of digitalis in Miles' Heart Treatment, physiologic tests were made. The question as to the presence of cactus was not considered of interest because cactus grandiflorus has been shown to have no physiologic action. The physiologic tests indicated that there were no digitalis bodies present in the preparation (in amounts that could have any therapeutic effects) in doses containing enough alcohol to induce narcosis. Examination in the A. M. A. Chemical Laboratory showed Miles' Heart Treatment to be a solution of a compound or compounds of iron representing about 0.12 gm. metallic iron in 100 c.c. A solution of iron glycerophosphate in 10 per cent. alcohol, with about 5 per cent. glycerin, and a little sugar or glucose had much the same chemical properties as Miles' Heart Treatment (Jour. A. M. A., July 26, 1919, p. 287).

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER, } Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 4 HUNTINGTON, W. VA., OCTOBER, 1919. Subscription $1.50 per Year
Single Copies 20 Cents

CLINICAL AND PATHOLOGICAL STUDIES OF PANDEMIC INFLUENZA.

By Aaron Arkin, A. M. M. D., Ph. D.
Professor of Pathology and Bacteriology
West Virginia University—Contract
Surgeon, Medical Corps, U. S. A.

Read at Annual Meeting of the West Virginia Medical Association, Clarksburg, May 20, 1919.

With each new pandemic of influenza the notion that it is a new disease revives. As a matter of fact a similar epidemic was described as early as 412 B. C. by Hippocrates. There have been others since 1647, and the great pandemic of 1889-90, which began in the Orient and spread through Russia and then, throughout the world, is still remembered by some of our older members. The present pandemic began in 1917, probably also in the Orient and reached Germany, Austria, England, France, Spain and the United States. After entering this country through Massachusetts, it spread in wave-like fashion across the continent at the rate of about 100 miles a day. We shall not attempt here to discuss the epidemiology of the disease. Suffice it to state that the disease is no doubt spread by direct contact through infectious droplets, secretions of the mouth and nose, and enters the body by way of the upper respiratory tract. Hand to mouth infection, infection from eating utensils, and conjunctival infection probably also play an important role.

SYMPTOMS

The disease in uncomplicated cases is known as Spanish influenza or three day fever. It is characterized by a sudden onset, one to three days after exposure to infection, with an acute coryza, a dry red pharyngitis, and a fever of 101 to 105 degrees F. There are usually headache, backache, a cough, and marked weakness and prostration. The latter is out of all proportion to the duration or severity of the attack. Epistaxis is not uncommon. The temperature reaches the maximum in two to four days and drops to normal in five to seven

days. The pulse is at first rapid then strikingly slow, many cases running a pulse of 60 to 70, a few as slow as 50 for a couple of weeks. Frequently there follows a pan-bronchitis, in some a tracheitis, followed by broncho-pneumonia, lobar pneumonia, or hemorrhagic pneumonitis, with edema and a mortality of 15 to 40 per cent. It is estimated that at least 600,000 have died of the disease in the United States alone.

The severity of the present pandemic, the suddenness of onset, the number of deaths from pulmonary complications—bronchitis, bronchiectasis, hemorrhagic pneumonitis, broncho-pneumonia and lobar pneumonia, abscess, empyema—agree with descriptions of previous epidemics. Some patients develop a high irregular temperature, rapid pulse, and marked cyanosis and dyspaoea with expectoration of much frothy muco-purulent or thin bloody sputum. These may be present with very few physical signs of lung involvement. Physical examination of the chest is usually negative for the first few days. Then sibilant and sonorous rales appear, or they may be crepitant and sub-crepitant. There may be bronchial breathing, increased voice and breath sounds and dullness on percussion. Then definite evidence of broncho or lobar pneumonia appears. These may be followed by pleurisy, empyema, or abscess. Death usually occurs in seven days to three weeks.

BACTERIOLOGY

There is at present no known laboratory method by which influenza can be differentiated from an ordinary cold or bronchitis, and no method by which we can determine when a person ceases to transmit the disease to others. The cause of the disease is still in doubt, although it is generally agreed that the influenza bacillus of Pfeiffer is not the specific organism of influenza in this epidemic. That the influenza bacillus, pneumococcus, streptococcus, staphylococcus and others play an important part as secondary invaders can no longer by questioned. It is furthermore evident that these bacteria modify the clinical course and pathologic findings, so that in the complicated cases we are concerned with changes produced by combinations of infecting bacteria. The influenza bacillus produces a definite type of pulmonary disease, differing from that produced by pneumococcus or streptococcus. However, we see combinations of two or more frequently. So definite is the pathology of influenza in fatal cases that one cannot escape the conclusion that we must be dealing with a disease produced by a specific germ which opens up the channels for infection by pyogenic bacteria in the complicated cases. These bacteria would differ in different localities with the prevailing flora of the repiratory tract.

The discovery of a filterable virus was first reported by Nicolle and Lebailly of the Pasteur Institute in October, 1918. They used the Chamberland filtrate of bronchial secretions and reproduced the disease in humans and monkeys. This was followed by the work of Gibson and his associates, and Wilson in England. They were able to produce a febrile condition in monkeys with filtrate. The virus is 0.15 mm. to 0.5 mm. in size, Gram positive, and anaerobic. It has been found in the sputum, blood, pleural exudate and lymph glands. It is pathogenic for guinea pig, mouse, rabbit and monkey. These animals show lesions closely resembling those found in human cases. The organism has even been cultivated in the test tube by the Noguchi method. I think that this or-

ganism of Gibson, Wilson and others is the specific cause of the pandemic.

In the first fifty of about 400 cases of influenza seen by us among the Student Army Training Corps at West Virginia University, Morgantown, I made bacteriologic examination of the pharynx at the entrance of the posterior nares on blood agar and Loeffler's serum. I found B influenzae in 36 of the 50 cases, in 16 in pure culture, in 10 associated with pneumococci, and in 10 with streptococci and other bacteria. There is no doubt that these play a very important part as secondary invaders and are the cause of the fatal pneumonias. Blood cultures in 15 cases proved sterile in broth cultures of 5 c. c. of blood to 150 c. c. of broth, and also in agar plates containing 1 c. c. of blood to 10 c. c. of agar. Blood counts in 20 cases showed in 12 or 60 per cent a white count below 10,000 or a leukepenia during the first week of the disease. In 3 the count was only 4000. Urine examinations in 20 cases showed a trace or more of albumen in 4 or 20 per cent. In two cases casts were also present, but no blood.

Our 400 cases of influenza can be classified into three distinct types, (1) respiratory, (2) cerebral and (3) gastro-intestinal. We have already discussed the pulmonary symptoms. Of the cerebral cases we had ten with definite mental impairment, characterized by drowsiness, wandering of mind, and coma. In four of these, delerium was marked. Several cases, after recovery from the febrile condition were stuporous, and in a state of lethargy closely resembling the encephalitis lethargica since carefully described by many clinicians. Whether these patients were suffering from a post-influenzal toxaemia or in addition a true encephalitis I am unable to state, although I am inclined to consider their condition post-influenzal. We had only six cases with marked gastro-intestinal symptoms, such as severe vomiting, diarrhoea or marked constipation.

PATHOLOGY

As already indicated in the discussion of the bacteriology of influenza, the pathology of this disease varies with the bacteriological findings. We can demonstrate definite changes in the lungs due to the influenza bacillus.

In cases in which B. influenzae is found in pure culture in the sputum, bronchial secretions, and lung tissue post-mortem, the changes have been very definite. When death occurred within a few days from the onset of pulmonary symptoms, Wolbach has found the lungs only partly collapsed, very dark red and filled with large amounts of bloody fluid. Through the lung, however, are numerous areas containing air in which the alveoli are greatly distended or emphysematous. This condition of acute alveolar emphysema is due to the great exudation of a fibrinous fluid from the smaller bronchaoles and the alveolar ducts preventing the escape of the air. Rupture of the distended alveoli may result in emphysema along the large vessels and hylus of the lung to the mediastinum, or subcutaneous tissues of the neck. Subpleural hemorrhages are common. There is also a bloody fibrinous pleuritis. The bronchial mucosa is dark red, often covered with a purulent exudate, and the peribronchial glands are greatly enlarged.

Patients who live ten days or more present a purulent bronchitis and bronchiolitis with discrete or confluent hemorrhagic broncho-pneumonia. The smaller bronchi are distended or bronchiectatic. Abscesses may develop around these. The pleura may be covered with a fibrinous exudate or there

may be empyema. Interstitial emphysema, sometimes subcutaneous, from rupture of distended alveoli may follow. Extensive organization and cicatrization of the consolidated areas occurs.

The broncho and lobar pneumonia frequently show pneumococci of types 1, 2, 3 and 4, most frequently the last type; or hemolytic streptococci, especially in the cases with empyema, or abscess formation in the consolidated lobes. In cases with multiple peribronchial abscesses the staphylococcus aureus has been found. The pathology of influenza has been carefully studied first in England by Muir and Wilson, and others. They have described the changes which correspond very closely with those observed in our country by Macallum, Wolbach, Opie, LeCount and others. The changes in the rest of the body are not very marked in influenza, except in certain complications. In addition to the hemorrhagic pneumonitis, broncho-pneumonia, lobar pneumonis, miliary pneumonia, purulent bronchitis and acute alveolar emphysema of the lungs, there may be found a serous or seropurplent hemorrhagic pleurisy, or empyema. Lung abscess has been mentioned.

The heart may present a dilation, usually of the right side. Sub-pericardial and sub-endocardial hemorrhages are found. Otherwise the heart is remarkably free from gross changes.

The kidneys frequently show a cloudy swelling, and rarely an acute nephritis. In the liver are found early fatty changes especially on the surface. There is often a slight edema of the brain. In the muscles waxy degeneration and hemorrhages have been described. The testes, according to Wolbach, have marked degenerative changes, probably of toxic origin. In some cases a suppurative otitis media is found, also suppuration of the frontal and other sinuses. Meningitis is very rare.

I had three cases with deep sub-cutaneous abscesses. One patient developed a soft mass in the region of the left pectoral muscles. This was found to be a deep staphylococcus aureus abscess beneath the pectoral muscles. Five days later he developed a similar abscess on the left chest beneath the axilla. A week later another abscess occurred on the left thigh in the gluteal region and one on the right forearm. These were all drained and when the patient was last seen he had a normal temperature and was on the road to recovery. He had a severe influenza and broncho-pneumonia of three weeks' duration before these abscesses developed.

I am firmly convinced that an attack of influenza frequently causes an inactive tuberculosis to become active and that we may expect to see an increase in the tuberculosis rate in this country as a consequence of the epidemic. I have examined six cases of active pulmonary tuberculosis immediately following influenza, running a remittent temperature averaging 100 to 101 degrees, a pulse rate between 30 and 40, and showing tubercle bacilli in the purulent sputum. These cases usually terminate fatally from miliary tuberculosis or broncho-pneumonia.

I shall not here discuss the treatment of influenza and influenzae pneumonia except to call attention to the undoubted value of the anti-pneumococcic sera in cases of pneumonia due to the pneumococcus. Determination of type of pneumococcus should be done by the Avery or mouse method. In type 1 or 2 infection the serum seems to be specific. It is of less value in the other types. Of twenty cases of post-influen-

zal pneumococcus pneumonia treated by me with Mulford polyvalent serum only three died. The serum was given as soon as physical signs of pneumonia were discovered. We digitalized our pneumonia patients and the rest of the treatment was symptomatic. There is no specific drug treatment. Plenty of fresh air, but avoiding chilling of patient, liquid diet, catharsis, aspirin 15 to 30 grams per day, constituted the early treatment of the influenza patients.

I consider the following the chief preventive measures:

1. Strict isolation and quarantine.
2. Reporting of all cases.
3. Proper face masks used by all attendants; perhaps also goggles.
4. Disinfection of all mouth and nose secretions.
5. Careful hand disinfection.
6. Sterilization of all eating utensils, especially at soda fountains, restaurants, etc.
7. Prohibiting of spitting and coughing.
8. Stopping of unnecessary public gatherings.
9. Sheet cubicle method of separating beds in wards of hospitals, or home.

There is no vaccine which will prevent influenza. Pneumococcus vaccines will protect against the secondary pneumococcus pneumonia; perhaps the streptococcus vaccines will protect against streptococcus complications. Quinine solution 1/10,000, or dichloramine-T spray (2 per cent in oil) are of value in protecting against pneumococcus infections.

INFLUENZA PROPHYLAXIS

By S. D. Hatfield, M. D.
Iaeger, McDowell County, W. Va.

Read at Fifty-second Annual Meeting of West Virginia Medical Association, May, 1919.

At the hour of the greatest distress on the part of our beloved Nation, as well as that of our Associates in War, we were overwhelmingly confronted with the greatest demand on the profession, and that at an hour when our ranks had been broken by the urgent need of physicians and surgeons at the battle fronts, that has ever been visited upon the guardians of the health of the people. Those among our colleagues who had been called to duty and who were performing the task of the hero on the battle fields of Europe, were saved the almost equally as hard and dangerous task which confronted our number at home in the offensive against the most dreaded foe the world has ever known, —Spanish influenza.

It was during the latter months of the year Nineteen Hundred Eighteen, and the early part of this year, that our professional army entrenched themselves with all the means and measures at their command to wage defensive, as well as offensive, war upon the intruding enemy. Science had perfected many wonders pertaining to the prevention of the spread of infectious diseases and had accomplished the task in the spirit of a glorious victory, but alas! our defenses, however perfect, gave way before the awful wave which rapidly spread almost around the entire world, swiftly increasing in scope, until 46 per cent of the population of the world fell victim in its path. The casualty list re-

sulting from this onslaught has vacated the seat by you, my brother, in the membership of the West Virginia State Medical Association. Many faces familiar to you and to me are not to be seen at this hour, but it should be consoling to have fought with the absent ones,—those who fell on the field in the line of duty, and who, many times, went "over the top" and out into "No Man's Land," in their endeavors to defend the cause of "liberty," and especially the lives of those who so faithfully turned to them for protection in their then overburdened distress.

A question that is now of great interest to the world, is how we are to be protected against another invasion of this same foe. It appears recorded that the plague of Egypt, the epidemics of infectious and contagious diseases at the many periods of time from the beginning to the present century, have not taken as great a toll of human life as the one through which we have just emerged. Never was there a time recorded in history where an infectious or contagious disease became so universal, in such a short time, as that of Spanish influenza.

It is an interesting fact that these United States were, at one and the same time, under quarantine against the spread of this disease. Yellow Fever has many times spread over parts of a country, a city or a state, but never has it appeared under quarantine over a larger territory than a portion of one or two of our Southern States. Science has long since discovered the cause of this once dreaded disease of an epidemic nature, and the medium through which it was communicated from person to person; thereby solving the problem of its prevention, until it is scarcely known as an epidemic disease. Asiatic Cholera has often invaded many localities of the Far East, and parts of other Countries, and has been imported to America, but its spread has never gone over a territory as large as that involved in the Yellow Fever epidemics.

Typhoid Fever has, in the past, invaded large communities and was uncontrollable until Science, through her constant efforts and long period of centuries, found through its Bacteriologist the true and only cause of the disease. Now, we have the profession, without one dissenting voice, indorsing the vaccine and the sero-vaccines used which establish an acquired immunity against this once dreaded disease. From history we have learned that when our armies were mobilized for war, the toll from typhoid fever alone exceeded the number killed in battle. In the European War, the death toll on account of typhoid fever has been nil, compared with the great number dying from the disease in previous wars.

A knowledge of the specific cause of Spanish influenza is, therefore, essential to the prevention and eradication of the plague. We have many forms of the bacili introduced by the modern Bacteriologist as the specific cause, but none have stood the acid test of Koch's law; none have been satisfactorily proven to be the one the profession and Science has sought, and are still seeking. The Pfeiffer's bacillus can not be considered the cause of the past pandemic, as it has been found only in a very small percentage of cases. It is not my purpose to enter into the discussion of the etiology of the disease further than the knowledge of the specific cause would have to do with producing the acquired immunity. It is hoped and desired that we may have this thought of the subject carefully criticised, and that we

may get all the facts pertaining to the latest information regarding the specific virus of influenza.

Regarding the transmission of the disease, everything would point to the droplet infection as being of paramount importance. Numbers of mild carrier cases, a population of susceptible people, and a disease infecting the upper respiratory passages, causing a prolific secretion of infectious material, produce a combination which must result in a pandemic or a widespread epidemic. The unsanitary conditions of industrial life greatly promote the spread of the infection.

Of all the measures used for the prevention of the spread of influenza, none are brought to you as a positive means of combating the disease, but are given their place and each is to be considered for what it may be worth.

Immunity against the disease, either natural or acquired, is the real scientific way of escaping the infection when it appears in the pandemic or epidemic form. It is true that a very small percentage of the population is naturally immune to the disease. Especially does this seem to be true in the very aged, the very young, and those of all ages who may have some form of anaemia. We have learned that to have the natural immunity to any infection, that we must possess certain antibodies within the blood stream which acts in some unknown way to prevent the infection getting its culture or growth in the tissues of the body. This natural resistance to the organisms peculiar to each infectious disease, and justly so with influenza, which we believe to be due to a specific virus, is found in the most healthy person and one who has acquired his resistance during that most active period of the stage of his development. Then, it would be inconsistent to think of the aged, the very young, and the anaemic possessing natural resistance to the infection. It was true in my series of more than one thousand cases reported to the Public Health Service of this State, that the classes above referred to, numbered a very small percentage of the cases. It is not for me to explain to you why this is true, but I find that many other men have had the same experience, and they, too, are unable to explain any satisfactory cause for the influenza virus having as a preference the healthy adult, the young man or woman in active duties of life and sparing those who are tottering on the brink with age, disease, or who have not been conscious of the things of life by its immature existence. It was the experience of many to see the milder types of disease and quite a number of uncomplicated influenza cases among this class.

It was expected that our Bacteriologists would in the early hour of the spread of the infection, seize the necessary material from which to prepare a vaccine that would, like that used as the prophylactic against Typhoid Fever, Diptheria, Cholera, Ordinary influenza, and other infections, which would at once, stop further spread and thereby save the millions of lives that were lost without this knowledge. And too, we may have expected the chemist or other scientist to find a specific for the disease, as Quinine in Malaria, Mercury and Arsenic in Syphilis. No specific came to our rescue and by lack of this knowledge the Therapist was left to guide himself by the symptoms and other manifestations observed in each case. This has resulted in great variance in the treatment as well as the means used in the prevention of the infection. Hav-

ing had knowledge of the disease being imported into this country and noting the great toll of life it had exacted in the war stricken countries of Europe, in advance of its appearance into this immediate section of our State, I was interested at once in whatever measures or means that had been, or was then, being used in the possibility of establishing for myself and family an acquired immunity against the infection. It having been my custom for a few years to vaccinate myself with the Parke, Davis Influenza Vaccine when exposed to influenza, and having confidence in its virtue to produce an acquired immunity against this disease, I revaccinated myself with this same vaccine and at once sought other measures which had proven to me to be of service in the prevention of the spread of respiratory affections. Among other means used for my own protection was to live and sleep in the open at all times. My prime thonght was not to be found in congested, closed, dusty and ill-smelling rooms. Not to visit a patient in such quarters. Before entering a room where there was a suspected case of influenza, I invariably requested that the door be left open for a moment before entering the room, and at the same time requested that a window be raised, that the air of such quarters might be changed, or at least allow fresh air to mingle with the impure and germ laden dust of the sickroom. It was my further aim to avoid coming in contact with the patient on making the necessary physical examination, to prevent touching materials contaminated with the excessive mucons secretions that were characteristic of the influenza. To never drink or eat about the home of the patient and to drink tea or coffee as a safeguard when thirsty for water, and to eat an onion daily.

The writer does not take the position that there is real virtue in the Parke Davis Vaccine just because he happened to use it before the pandemic reached his vicinity, and does not base any special merit in its immunizing properties because of this fact. However, he wishes to be clearly understood that he is in sympathy with this line of prevention, and believes that our profession will have solved the problem and that it will have been proven to the satisfaction of the minds of the most pessimistic, before we are again confronted with such an extensive spread of the disease. We have history to remind us that it is more than probable that there will be a return of the infection next year. The Russian influenza of 1889, which took a great toll of life in this country, came again in 1890, in a less severe form, and did not reach the point of pandemic as that recorded in 1889. It is interesting to note that the 1889 pandemic killed most of our aged people; while, as we have learned, the past pandemic had a predilection for our youthful and most active business men and women. We are justified in our conclusions that it is probably true that the 1890 epidemic of influenza was made less active by the immunizing properties of the blood which resulted in the pandemic of the previous year. Is it not true, that the population affected in the first year were not all stricken in the second one, the pandemic of 1889 becoming the epidemic in 1890? We know of no other preventatives used in the spread of the disease that might have played any better part than the acquired immunity from having had the infection the preceding year. We are all familiar with the fact that one attack of typhoid fever, usually establishes an acquired immunity against that infection. Also, that one attack of Variola,

rubiola, rubella, rotheln, parotitis, pertussis and many other infections and contagious diseases are considered to have established an acquired immunity. It is from this source that the Bacteriologist gets the starting point to give to the world another great gift that we trust will be in his power to soon deposit among the number of other accepted vaccines, sero-vaccines, etc., of which we are familiar. On the other hand, we know that one attack of Erysipelas usually predisposes the victim to another annual attack of the disease, but which is, almost without exception, found to appear each year in a milder form.

The newspaper had much to say about the second infection of influenza appearing in individuals during the past pandemic. I am under the impressions that many physicians have accepted this to be true. It has not been possible for me to convince myself that any patient that I have attended ever presented the clinical symptoms of the disease more than once. This was my observation and it has caused me to assume a rather skeptical attitude toward the opinion held by others of the disease appearing in the same individual the second time during the pandemic. One family of ten who became infected with influenza in the early part of the pandemic, had one infant of two months and one boy of four years to escape the disease. In the more recent epidemic of the last six weeks which invaded my vicinity, the infant and boy referred to had the disease, but no other member of this family who had the infection in the pandmeic became infected. I made similar observations in as many as six different families. These facts, and my own convictions from clinical symptoms upon which I was forced to base my diagnosis, convinced me that one attack did seemingly establish an acquired immunity for a period of time longer than first thought by many persons. Suffice it to say that the writer found a large number of complications following the recrudescence of the infection that might have been improperly termed a second attack of the disease.

The first few weeks that I had occassion to study the cause, the incubation period, and means of prevention of influenza, I was impressed with the sudden onset of the disease in one member of a family, and then within scarcely forty-eight hours the entire family would fall victim. This lead me to investigate the question of the droplet as a source of the infection. The closed, dusty and heated rooms such as are usually found in the tenant home of most of our industrial sections of this State were other factors. To correct the environment and remove the predisposing factors, which, to me, was conclusive evidence of the mediums through which the influenza virus or germ transmitted, was a slow and tedious undertaking. After some two months teaching and reading health bulletins, I seccceded, in a limited sense, in convincing the people that I attended, and, in a great measure, succeeded in obtaining fair co-operation from the more intelligent ones. This aided me very materially in combating the further spread of the disease. In most of my visits after this time, the rooms were found open at all hours of the day and night, and the patient so arranged as to receive full benefit of a constant current of fresh air, and the prolific secretions were carefully collected and deposited in a vat of lime or cremated immediately. Before this regime of sanitation and ventilation was enforced, the family that had one member to contract the infection, would invariably, through the medium of the droplet infection, the hot, closed and

dusty room, communicate it to all persons of the household. Usually infants, the aged and invalids becoming victims of a mild form of the disease. In twelve families, of from six to twelve in each family, the enforced sanitation and ventilation kept the infection from other members without one exception. None of these families received the influenza vaccine, as its merits as a prophylactic measure was in the experimental stage, and I subjected only myself and family to this form of prevention.

From literature and from many interesting talks with our profession who have served in the respective Cantonment Hospitals in this country and the Base Hospitals of Europe, we learn that the influenza vaccine is used extensively as a preventive to establish a temporary or permanent immunity against the infection. Statistics furnished our profession by the many journalists, do not prove to our satisfaction that this method of prophylaxis has achieved that extent of immunity established by the allied vaccine of typhoid fever and other diseases. You will, no doubt, agree with me that this form of prevention is still in its experimental stage, and true, we will agree to the fact that our Bacteriologists have not as yet isolated the specific germ causing the influenza, or such a vaccine as would have, like that used against typhoid fever, been successfully used to immunize our great army, our civilian population and the great industrial armies of the world, and thus have saved the more than six millions of lives, which number exceed the casualties of the allied armies in the European War.

What virtue there may be in the active principle of the onion eaten during an epidemic of infectious or contagious disease, is a question. It may be that its properties to stimulate the function of the mucous glands of the respiratory tract, and thus, as it were, wash away the excessive clumps of the germs peculiar to influenza, or that it may have some specific antiseptic property against the growth and development of such germ, or that its deodorizing properties are more than the ordinary germ of influenza can bear in its endeavor to gain a habitat in its host. The simple idea of the eating of onions as a preventive measure against the spread of the many infectious and contagious diseases of which human beings are victims, and which measure is valued and held most sacred by mothers, and largely true by the laity, as well as a few of the profession, may not appear so unscientific or as worthless, as many measures used by the profession during the recent pandemic of influenza.

The mask used by the profession as a practical measure of prevention against the infection of influenza is worth as much, perhaps, as the eating of onions, the wearing of asafetida about the neck, the many other arts and schisms resorted to, including the faith in the Divine Being on the part of many cults and religious sects. The writer does not wish to go on record against the use of the mask as a preventive measure against the spread of the infection of influenza, but as a practical prophylactic measure, he would have as much faith in the one commonly used as that cited by the laity. In our hospitals for infectious and contagious diseases, where the physician can carefully attire himself with gown, cap and mask, it would be practical and of accepted virtue as a precautionary method against the spread of the disease from the daily wearing apparel. For the protection of the individual who wears the mask, the

writer can not see the logic of its use as a practical preventive. The real virtue to be received from its use, would be the object lesson it would have for the laity, and those under quarantine, and would demand on their part a better co-operation and a more careful procedure in their efforts to assist the profession or the Epidemiologist.

With absolute quarantine, (and quarantine should be absolute), the isolation of the victim as much as possible, the quarters or hospital carefully arranged to permit free access of air, and thereby effecting the most thorough ventilation of the sick-room, the most scrutinizing precautions against the carriers or the victims of the disease dissiminating it through the medium of the droplet, and the vaccination of the attendants, nurses, physicians and others who may become exposed to the contagion in any manner will, in the conviction of the writer, suffice to allay an epidemic of influenza and prevent the spread of the infection to a population to a degree that would be termed an epidemic.

"DAMN THE FLU, ANYWAY"

By C. H. Maxwell, M. D.
Morgantown, W. Va.

Read at Annual Meeting of West Virginia Medical Association, May, 1919.

This is a curious title to a paper by one who never uses cuss words. The subject was selected in a peculiar way. I had just come out of a house where a prominent young mother had died suddenly from an embolism from thrombosis of the femoral vein, of not two hours duration. The patient had been extremely ill for many days with influenza, but finally had recovered. I had discontinued my calls on Friday. Sunday morning, however, at 6 A. M. the patient called the nurse and complained of a numbness and heaviness in the left hip. At seven they called me. In ten minutes I was there, but all was over.

When I came out of the house, some unknown passer-by was invited to ride with me to town. He was her neighbor and had heard of the sudden death of his friend. We were talking of "flu" in general and this case in particular. As we rode along he became grave and meditative, and as if he were talking to himself, he said, in half under tones, "Damn the Flu, Anyway."

This seemed to express my ideas of it in as impressive a manner as possible; hence the unusual title.

The more we see of it, the deeper the anathemas hurled against it. When I first began to see it, I called it "grip," but the more I saw of it the less I thought it the same thing. The bacteriologists tell us it is identical with the Russian influenza of 1889. I did not have the misfortune to see any of those cases but somehow I feel that this pandemio is greatly different from the ordinary grip case.

This paper will probably not have a single suggestion that is not familiar to every one of you. It is just a hodge podge of disjointed ideas as they race through my mind. But this subject is so fresh and past effects so appalling and the future so grave that I feel that the subject should be kept vigorously before us so that we will use all our alertness to combat its ravages.

At the Martinsburg meeting there was a United States Public Health Officer there trying to get 500 medical men to go to Boston and vicinity to help com-

bat the epidemic. Somehow it seemed to me that the ordinary supply of physicians in a place ought to be sufficient to do the work of any epidemic that could come down the pike. I had had experience with little epidemics of measles, whooping-cough and typhoid and these only added a little strain to our work, but when the "flu" enveloped our town with all the suddenness and force of an avalanche, I could readily see why the Bostonites called so loudly for help. With ten of our youngest and most active men in the Government service, the work was an unbearable burden on the older men, especially when every doctor in town under 50 years was down with the plague, some of them two or three times. By the way, out of the first 600 cases, there were only two over 50 years of age.

In my work I saw about 650 cases. Eleven of them died. One died with embolism, one with meningitis, two with nephritis, one with jaundice, five with pneumonia and one with influenza without complications. The meningitis case was 18 months old; four women and a girl died with pneumonia (so called); one boy and one woman died with nephritis. Not a man died. All the women except one were unusually strong and robust. Two would have been mothers in a few weeks.

At the first of the epidemic the word got out that pregnant women were sure to die. Where the word came from I do not know; but I found that pregnant women stood the strain well, as a rule, as I had several births while the mothers were down with the infection, and I had many that carried their children through to term with no untoward results.

The first one died October 13, two weeks after my first case. The ninth died on November 13th; that is, nine in a month. This began to look serious. These all occured in the first 150 cases. Then there were 400 cases without a death. I began to feel quite an expert. Then along came a recrudescence in February. Out of 60 cases I lost two—one with embolism; another with jaundice. So I wasn't so smart after all.

I had about 40 pneumonia cases. Of this lot, only one had a consolidated lobe. This partially cleared when jaundice set in and the woman died in two days. This no doubt was haomotogenous. I had one other case of jaundice that recovered after many weeks.

I feel sure that the broncho-pneumonic conditions is very different from the broncho-pneumonia of measles and whooping cough. Just how they are different I cannot say. But usually there is a great quantity of secretions forms in the lungs, apparently much different from the sputum of lobor pneumonia. In some cases incredible amounts of sputum are thrown out. And this is kept up sometimes for weeks. In some cases the secretions accumulate so rapidly that the patients are literally drowned in them.

By the way, I am not a fresh air fiend in the treatment of pneumonia of any kind. Fresh air is all right, but there is an insane idea rampant among some people that pneumonia demands doors, windows, ventilators and transoms wide open and fires down, regardless of weather conditions. Pneumonia is the most deadly disease we contend with, one that demands the conservation of all possible energy and power of resistance, one in which we can not afford to take chances of lowering the vitality in any unnecessary manner. What sense is there in using up the reserve force of the patient by compelling him to

warm the air of the room that comes in contact with him while he needs every atom of that energy to combat the disease? What fresh air faddist can physiologically explain how an intensely toxic pneumonia patient can take howling winds of a zero atmosphere and warm it in his lungs sixty times a minute without abstracting an undue amount of his vitality in warming the air instead of throwing off the disease? What's the sense of having the room so cold that the nurse with all her furs and muff is all a-chatter all the time? How could you expect a depressed patient to stand this abuse? There is no doubt that pneumonia patients do better in a warm, comfortable room than in wide-open-window-and-door treatment.

In this epidemic all the deaths in my practice have been native born Americans. I mention this as a fact of not much importance probably. The foreigners have a penchant of crawling between two feather beds and keeping a roaring fire going, the higher the fever, the hotter the fire. Any outside air is not permitted so they nail down the windows. They lie there and sweat and steam and soak, and in a few days the influenza is gone.

I try to steer between the fresh air fiends and the hot air fools. I am not sure but there is still a lot of virtue in mustard plasters, cotton jackets and mush poultices. The old expression, "Heat is Life, Cold is Death," holds good in pneumonia as well as in the newborn babe.

I doubt if influenza is transmissable after three days. I believe that it is transmitted in almost every instance before the carrier is aware of the fact of his having it. I doubt if it is transmitted in any way except from the breath of the infected party. I have not known of a single instance where the third party transmitted it. I have made it a point to trace every case of late. I have not been able to trace every case to some other case, but I have always been able to find that they have mingled with a crowd or some neighbors had been in at the proper time to transmit the disease.

I have found by putting the first infected person in a family in a room and keeping him strictly by himself, except for an occasional visit by a masked nurse, that he is the only one that gets it in the family, provided, of course, he has not already infected them prior to his isolation. If my observations are on the right track, it will not be so difficult to control the disease.

There is a pernicious spirit among some people and in some so-called doctors, that the influenza "just comes;" "it's in the air." I combat this notion by saying, "You get no fruit without trees; no wheat without seed; no children without parents. Nothing comes without something before it. You can raise no garden without planting it. A stray plant might grow but its seed was there first. So no disease comes without some one preceding it. They all can see the point, and are convinced.

Long isolation is unnecessary—three days, I believe ample. This has been satisfactory in my practice. Long isolation and quarantine will do little good. Most people do not object to being isolated if it is to be only a short time. And even if it is necessary to be isolated a long time, they generally put up with it for the good of others. Most people are willing to do right, even if it does cause them personal inconvenience.

I found that most people in this epidemic took a proper view of the situa-

tion. Those who had always had instant response from the doctor took a philosophical view of the matter when the doctor was called at 7 A. M. and he didn't come till 18 hours later. "We'll take our turn," would be the usual observation. The exception brought out the selfishness of some. One case was complaining that I came only once a day. "I am mighty sick, and I want you to come in often. I have plenty of money." I said, "You may have plenty of money, and you also have two nurses (imported), but I have several families that have no money or nurses, and they are all down. They need me worse than you do. When your turn comes, I'll be back." One fool woman said, "Let some of the poor trash go, and look after my husband better." My answer was more emphatic than polite and she looked as if she fully understood what I said. But these cases are rare, for I find after all, the great mass of people are unselfish when a grave emergency arises, and are willing to bear their full share of discomforts. It is the times of distress that brings out the good and noble in the human soul, and it does one good to see the willingness of most people to help in troublous times.

What I consider a pathognomonic symptom of "flu" is the constant movements of the infected person. He never lies still a half minute. He moves his leg or shrugs his shoulder or jerks his arm or shifts his hips or turns his body. He may not seem much sick but he keeps up his movements. You say, "What makes you wiggle so?" He will say, "My back hurts—my legs ache; I don't feel good." There is no other disease that I have seen that shows this kind of restlessness. Most of the "book" symptoms are absent in epidemic influenza. It has a set of symptoms of its own. This restlessness and the purple tongue are the most distinguishing ones.

The treatment at first with me was somewhat empiric but in the crush of work, regular routine had to be evolved, as it was impossible to give proper attention to 75 patients in a day. A touch with the hand to test the fever, a feel of the pulse, a look at the tongue, a word as to feelings, and pass to the next one. In this way, the sickest ones could be picked out and given more detailed attention. But it is a trying affair to have a dozen patients in a litlte house and see that each one gets the proper attention. It is not so much trouble when they were all adults, for we can give them a common receptacle and dish out their portions like they do the C. C. pills in Army Camps, but when the ages range from the new-born babe to the grandfather, it requires more time.

I depend almost entirely on preparations of accetamilide to relieve the physical discomfort, and gelsemnim and veratnum to quiet the heart and nervousness. Then I pushed strychnine and quinine stimulants from the first visit, feeling that the disease is of short duration, and that if the reserve forces were called into action, the disease would probably be thrown off without complications. Like Pershing on the battle front when he got the enemy on the run he used up his reserves to keep them running.

I gave no alcohol in any form, but depended on strychnines, coffee, and tea for stimulants. I ordered large quantities of hot drinks, preferably peppermint or catnip tea, but hot water is about as good. I found when patients had already been filling up on boneset that they almost invariably pulled along without complications. But boneset

cannot be kept up long without upsetting the stomach. An old "granny" nurse said, "I have not seen a case of pneumonia follow a case that had sweated freely." There is doubtless a good deal of truth in it. For no doubt much of the toxins is thrown off this way.

One can never tell whether treatment actually prevents complications and sequellae but if one has a long series of cases with few untoward results, his line of action is at least satisfying. Free purgation, abundance of water and food, artificial digestants, strong stimulants, warm rooms, good bedding, sensible ventilation, seem to be the line of procedure that gives the best results. I would much like to add good nursing, but that was the one (apparent) essential we had to forego. "Get us a nurse," was the cry. "None to be had. Do the best you can," was the answer.

I found that one with good health can stand a physical and nervous strain for weeks at a time without any apparent ill-effects. For eight weeks I worked twenty hours a day; making it a point to get to bed at 2:00 A. M. and not stiring before 6:00 in the morning. When the epidemic commenced, I thought I had to make all the calls that came in, so I worked 44 hours without rest. But I saw it was not a spurt but a prospective strain of weeks, so I refused to stir when once abed. During this time I ate a substantial meal every five or six hours. During that time I had a sustained feeling of well-being; never "dog-tired" like I had been many times before. At times, of course, intolerable sleepy spells came over me, but it would shortly pass away. One night I fell asleep twice while running the automobile; the second time I came near running over a cliff, and instantly I became wide awake. So, I believe the human system can stand double its wanton work if thoroughly nourished.

Watching the funerals in their unseemingly haste to reach the grave yard, and the undertakers still unable to finish the job, having to bury the dead at night; with full realization of the wholesale destruction of this invasion, with the deadly complications and sequellae stalking in its wake, and death lurking at every turn, with the long list of unanswered calls, the constant jangle of the telephone, the ever-widening circle of invasion, and the ceaseless cry from every nook and corner of the town and surrounding country, "For God's sake, send us a doctor," with a veritable famine of essential drugs, and absolute dearth of skilled nurses, with whole families prostrated and no one able to wait on another, and no kindly neighbor to lend a helping hand, ever anxious to be of the utmost service to the stricken ones, we attended them the best we can, and rush to the next house only to find crape on the door, and turning away, tired in body and sick of soul, we hurry on and on, muttering to ourselves, "Damn the Flu, Anyway."

September 8, 1919.

To the Editor:

So much has been said and written about the probability of the recurrence of the pandemic of influenza this winter that the Public Health Service felt it should make some comment on the subject. Quite frankly no one can say with any certainty whether there will be a recurrence of last winter's horror.

The statement submitted herewith is about everything that can be said with any measure of assurance. There is such a widespread fear of influenza that it is suggested that it be published

in full so that the public and even the medical profession may draw their own conclusions.

It will be observed that no mention has been made here of a cure, or specific. So far as the most careful scientific investigations have been able to determine, none has been discovered; the suggested remedies which give most encouragement are even now in their experimental stage.

Evidence collected during last winter's pandemic points strongly to infected eating and drinking utensils, especially in places where food and drink are sold to the public, as being one of the modes of transmission of this disease. In some municipalities this matter has already been made the subject of regulation, but the enforcement of the regulations often leaves much to be desired. In many parts of the country not even this beginning has been made. It is accordingly suggested that you take up this matter with your public as you deem will best further the enactment and enforcement of such regulations.

Very truly yours,
RUPERT BLUE,
Surgeon-General, U. S. P. H. S.

* * *

WILL THE "FLU" RETURN?

Authoritative Statement Issued by the U. S. Public Health Service.

Probably, but by no means certainly, there will be a recurrence of the influenza epidemic this year.

Indications are, that should it occur, it will not be as severe as the pandemic of the previous winter.

City officials, state and city boards of health, should be prepared in the event of a recurrence.

The fact that a previous attack brings immunity in a certain percentage of cases should allay fear on the part of those afflicted in the previous epidemic.

Influenza is spread by direct and indirect contact.

It is not yet certain that the germ has been isolated, or discovered, and as a consequence there is yet no positive preventive, except the enforcement of rigid rules of sanitation and the avoidance of personal contact.

A close relation between the influenza pandemic and the constantly increasing pneumonia mortality rate prior to the Fall of 1918 is recognized.

It is now believed that the disease was pretty widely disseminated throughout the country before it was recognized in its epidemic state. This failure to recognize the early cases appears to have largely been due to the fact that every interest was then centered on the war.

* * *

Above are the important facts developed by the United States Public Health Service after a careful survey and investigation of the influenza pandemic of 1918-19, carried on in every state and important city, and even in foreign countries.

No one of the many experts of the Service would make a more positive forecast of the all-important question, will there be a recurrence? All agreed, however, that a recurrence was not unlikely, and in the fact of the known facts, that it would be wise to be prepared, more with a view of being on the safe side than actually anticipating danger.

The following excerpts from the Government report are published for the benefit of the public and health officers

in the hope that this will serve to set at rest the daily publication in the newspapers of statements, which on one hand are calculated to lull the public into a sense of false security and on the other to unduly cause alarm:

Contrary to the opinion expressed frequently during the early weeks of last year's pandemic by a number of observers, the studies of the U. S. Public Health Service indicate that the epidemic was not a fresh importation from abroad. Careful study of the mortality statistics of the United States shows that there were a number of extensive though mild forerunners of the pandemic during the previous three or four years. In Chicago and New York in the winter of 1915-16 for example, these were sufficiently well marked to occasion considerable public comment at the time, leading in the latter city, to a well organized "Don't spit, don't sneeze" campaign on the part of the health authorities. The reports of the U. S. Public Health Service of January, 1916, show influenza to be epidemic in 22 states, including practically all sections of the United States. The epidemic was generally of a mild type and has since been almost forgotten. It occasioned, however, a noticeable increase in the recorded death rate from pneumonia.

In the spring of 1918 there was another sharp rise in the mortality rate from pneumonia. In the larger cities of the Atlantic seaboard these increases occurred during January, February and March. In the rest of the country, especially the central and western states the increases occurred in April, a month during which pneumonia mortality is generally on the decline. This increase was sufficient to indicate a strong departure from the normal. The increased mortality rate extended into May and in some areas even longer.

This occurrence has, it is believed, a definite significance in relation to the influenza epidemic. In the United States in the spring of 1918, a number of definite local outbreaks of influenza were observed; thus in Fort Oglethorpe, near Chattanooga, Tenn., in March; in Chicago during March; in San Quentin prison, California, in April, October and November. At Camp Funston recurrent outbreaks of pneumonia were observed in March, April and May of 1918 and were definitely associated with coincident epidemics of a mild type of influenza.

The rise in mortality from pneumonia, this very similar type of disease, in the spring of 1918 is so sudden, so marked and so general throughout the United States as to point very clearly to a definite relation. Everything indicates that the increased mortality from pneumonia in March and April of 1918 was the consequence of a beginning and largely unnoticed epidemic of influenza, the beginning in this country of the pandemic which developed in the autumn of that year.

In the British cities the epidemic manifested three distinct waves—the first and slightest in point of mortality occurring in June and July, the second and most severe in November, the third in February and March. Data which need not be cited here in detail indicate that the course of the epidemic in western Europe generally was similar. In cities of India the sequence was similar but the mortality far greater. In the United States the epidemic developed more largely in a single wave during September, October and November. If, however, the epidemic already men-

tioned as occurring in the spring be considered the first phase and the explosive outbreak of the autumn the second, a third phase of recrudescence is quite evident in many areas. In general, this winter recrudescence was less marked in those cities which suffered most severely in the autumn epidemic.

The prevalence of a serious epidemic of influenza was first recognized in and around Boston in September of 1918. Within about two weeks it was general in the Atlantic seaboard, developing a little later among cities further west. Rural districts were usually attacked somewhat later than large cities in the same sections.

In the cities east of the line of the Appalachians the excess mortality from pneumonia and influenza during the weeks ended September 14, 1918, to March 1, 1919, was approximately 5.6 per 1,000; in cities between the Rocky Mountains and the Appalachians 4.35; and in those of Pacific Coast 5.55 per 1,000.

Notwithstanding this general geographic relation, there are notably wide differences in the mortality rates of individual cities in the same section, even between cities close together, differences which are not as yet explained on the basis of climate, desity of population, character of preventive measures exercised, or any other determined environmental factor.

More details can be given only the briefest mention here. In order to secure reliable statistics of morbidity the Public Health Service has made special house-to-house surveys in a number of localities, ascertaining the number of persons affected, the dates of onset, and a few other simple facts, accurately enumerated groups representative of the general population. Partial analysis of the results of these surveys in eight localities, giving an aggregate of 112,958 persons canvassed, shows the following as the chief facts of interest:

The percentage of the population attacked varied from 15 per cent in Louisville to 53.3 per cent in San Antonio, Texas, the aggregate for the whole group being 26 per cent. This agrees with scattered observations in the first phase of the 1889-90 epidemic, when the attack rate seems to have varied within about these limits.

The case incidence was found to be uniformly highest in children from 5 to 14 years old, and progressively lower in each higher age group. It was slightly higher in females than in males of corresponding age; usually higher in the white than the colored population.

The ratio of pneumonia cases to total population varied from 5.3 cases per 1,000 in Spartanburg, S. C., to 24.6 per 1,000 in the smaller towns of Maryland. The pneumonia rate showed little correlation with the influenza attack rate.

The ratio of deaths to population varied from 1.9 per 1,000 in Spartanburg to 6.8 in Maryland towns. The death rate was by no means parallel to the influenza attack rate, but was closely correlated with the pneumonia rate. In other words the case fatality rate of pneumonia tended to be fairly constant, around 30 per cent. The death rate was notably high in children under one year old, in adults from 20 to 40 and in persons over 60; higher in males than in females of comparable ages; higher among the whites than the colored.

Concerning the important question of immunity conferred by an attack of influenza, the evidence is not conclusive, but there is reason to believe that an attack during the earlier stages of the

epidemic confers a considerable, but not absolute immunity in the later outbreaks.

In general the pandemic of influenza was largely similar to that of 1889-90 in its development, first a mild form, later in a severe world-wide epidemic, in the rapidity of its spread and its high case incidence. It had, however, been notably different in a much higher mortality, especially among young adults. Such evidence as has been gathered confirms the conclusion previously reached that it is transmitted directly and indirectly by contact. It appears probable, however, that the infection was already widely disseminated in this country sometime before a serious epidemic was recognized.

Despite the fact that there is still some uncertainty as to the nature of the micro-organism causing pandemic influenza, one thing is certain, that the disease is communicable from person to person. Moreover, judging from experience in other diseases, it is probable that the germ, whatever its nature, is carried about not only by those who are ill with influenza, but by persons who may be entirely well. Everything which increases personal contact, therefore, should be regarded as a factor in spreading influenza.

Much was heard last winter of the use of face masks. Though the use of suitable constructed masks will reduce the interchange of respiratory germs through inhalation, it must be remembered that there are many other paths by which such germs are transmitted from person to person. Soiled hands, common drinking cups, improperly cleaned eating and drinking utensils in restaurants, soda fountains, etc., roller towels, infected food—these are only a few of the common vehicles of germ transmission. The use of face masks appears to make people neglect these other paths of infection, and so the use of face masks has not been attended with the success predicted for them. If we would be more successful in combating influenza greater attention must be paid to the factors just enumerated.

The question of most practical and immediate interest is the probability of influenza epidemics; and the history of the last pandemic and previous ones would seem to point to the conclusion that this one has not yet run its full course. On the other hand this epidemic has already shown three more or less distinct phases and has been more severe, at least in mortality, than the three-year epidemic of 1889-92, facts which justify the hope, though not the conclusiin that it has run its course already.

It seems probable, however, that we may expect at least local recurrences in the near future, with an increase over the normal mortality from pneumonia for perhaps several years; and certainly we should be, as far as possible, prepared to meet them by previous organization of forces and measures for attempted prevention, treatment, and scientific investigation.

There should be no repetition of the extensive suffering and distress which accompanied last year's pandemic. Communities should make plans now for dealing with any recurrence of the epidemic. The prompt recognition of the early cases and their effective isolation should be aimed at. In this connection, attention is called to the fact that the cases may appear to be just ordinary colds. A recent extensive outbreak of what were regarded as "summer colds" in Peoria, Illinois, proved on investigation to be an epidemic of a mild type of influenza. Experience indicates that

these mild epidemics are often the starting points of more severe visitations. Hence every effort should be made to discover as early as possible any unusual prevalence of "colds."

For municipalities operating on a budget basis, it is important that all delay in providing the necessary financial support to the health authorities in dealing with a recurrence of the epidemic be avoided by setting aside an emergency epidemic fund. This may provide of the greatest value in carrying out important preventive measures in the early days of the epidemic, at a time when their beneficial effect is greatest.

The most promising way to deal with a possible recurrence of the influenza epidemic is, to sum it up in a single word, "Preparedness." And now it is the time to prepare.

ORGANIZATION OF PUBLIC HEALTH FORCES

By M. B. Williams, M. D.
Health Commissioner, Wheeling, W. Va.

Read at Annual Meeting of the West Virginia Medical Association, Clarksburg, May 20, 1919.

Reports now coming in from all over the country show that our death rate has about reached its normal level. Our experiences of the past winter now seem to be a bad dream, and as such we might be inclined to dismiss it did we not have the cold figures that represent the facts of the calamity suffered by this country. These figures do not make pleasant reading and we do not willingly return to a subject of which we have had such a sufficiency, and no doubt if we could all realize our desire we would never hear, nor see any more of this thing, but it is our duty not to ignore facts nor neglect to reap the benefit of the lessons which result from our experiences during a time of stress, as constituted by our recent epidemic. The medical world would not be fulfilling its obligation to the public if they did not take to heart the teachings of the past few months in order that they may be better qualified to handle future emergencies of this nature. During the war thousands died that Generals might learn how to conduct modern warfare, and during our influenza epidemic thousands died that we, as physicians and public health officials, might learn how to conduct warfare against disease.

In spite of the fact that we had, at least, six months' warning of what we might expect, we did practically nothing and thought of influenza in a more or less detached manner, thought of it as something that did not concern us directly, an attitude of mind due to that self-satisfied feeling that we as a nation would escape, and if the disease did reach here our national resistance would protect us. There is room for the belief that this false sense of security prevailed throughout our entire Public Health organization, high and low, and so we all drifted along happy, and especially not a great deal worried about influenza, the disease that was later given the credit for more than four hundred thousand deaths in this country during the three months of September, October, and November, not taking into consideration those that have died since that time.

You all know the story of how it prostrated Boston, raging unchecked and uncontrolled, and of what happened in Philadelphia when seven out of every thousand of the population died, and of

the thirty thousand deaths in New York City due to this disease. The story of the camps is one familiar to all and does not need repetition. The point I wish to make is, that we were not awake to our danger until we actually had the epidemic on our hands. Although we may have varied somewhat as to details, in a general way we all did the same thing in regard to prevention, control and eradication. And with what results? Nation wide, I believe that Health Officials all felt that from the standpoint of preventive medicine they had failed. Many felt that preventive medicine had met the biggest defeat in its history. I recall hearing one prominent physician express the belief that the next man that arises to boast of the victories of preventive medicine would probably choke to death. It would appear that now is the time to assemble our knowledge, inspect it thoroughly, cast out that which is worthless and analyze the remainder in such a manner that the deductions reached will enable us to more efficiently protect the public, for it must be borne in mind that in all probability we are to have a recurrence of this disease from time to time, and those upon whose shoulders rests the responsibility of the public health should be ready in advance with plan for prevention and administrative measures for relief. Following the exchange of views and the discussion of our present knowledge of influenza at the last meeting of the American Public Health Association, and having before us, as far as we can obtain them, results of the efforts of the research workers of the country, and the tabulation and analysis of the experience of our public health officials, it is to be expected that we should be able to formulate certain conclusions as a basis for a working program and guide in dealing with such extraordinary conditions. We should be able to act more intelligently in regard to the closing of towns and cities, the use of vaccines and the face masks, the value of the placard and other perplexing problems of a similar nature.

Although something is known concerning the nature of influenza, much remains to be determined, and administrative health agencies must act in the light of present knowledge. They cannot wait until the last word has been said as to the cause, or for the discovery of specific vaccines or sera for prevention or cure. The micro-organism or virus primarily responsible for this disease has not yet been identified, there is, however, no reason to doubt that such an agency is responsible. It has not been satisfactorily established that it is the identical disease heretofore known by that name.

There is no known laboratory method by which an attack of influenza can be diagnosed. There is no known laboratory method by which it can be determined when a person who has had the disease ceases to be capable of transmitting it to others. Evidence seems conclusive that the infective micro-organism or virus is given off from the nose and mouth of infected persons, and it seems equally conclusive that it is taken in through the mouth or nose of the person who contracts the disease.

Granting the truth of the above assertions preventive action logically follows the three following lines:

First—Break the channels of communication by which the infective agent passes from one person to another.

Second—Render persons exposed to infection immune or at least more resistant by the use of vaccines.

Third—Increase the natural resistance of persons exposed to the disease by augmented healthfulness.

The essential factors in breaking the channels of communication are prevention of droplet infection and sputum control.

There is every reason to believe both are of prime importance. Widespread publicity and education with respect to respiratory hygiene covering such facts as the danger from coughing, sneezing, spitting and the careless disposal of nasal discharges should be carried on in order to acquaint the public with the danger from these sources. There should be laws against the use of common drinking cups, and all eating utensils in use in hotels, restaurants and soda fountains should receive thorough cleansing.

Under the heading of closing the principle object is to lesson the number of contacts and it must be remembered that preventive measures practical in any community depends upon the nature of the community itself as to the population characteristics, industries and upon the stage and type of the epidemic curve, and it must be appreciated that measures that may be adopted in a purely rural community would not be applicable in the large city nor would the measures desirable at the beginning or end of an epidemic be found those best adapted for the intervening period. It is, therefore, impossible to lay down any rules and regulations for the guidance of all health officials alike.

The closing of schools is a measure which deserves the most serious consideration. Theoretically, schools increase the degree of contacts among children. If the schools are closed many of the contacts which children will make are likely to be out of doors. Whether or not closing will decrease or increase contacts, must be determined locally. Other factors which must be considered in this connection are, whether or not there exists efficient medical inspection and will the closing of schools release personnel or facilities to aid in fighting the epidemic.

If non-essential gatherings are to be prohibited and schools and churches are to be closed there could hardly be a reasonable excuse for allowing theatres, movies and meetings for amusements in general to remain open, even though we weigh against these things their value as an educational factor.

The wearing of proper masks in a proper manner by those who are directly exposed to infection should be encouraged. Of doubtful value is the enforced wearing of masks by the entire population as carried out in San Francisco and a few other cities. The isolation of patients suffering from influenza should be practiced, and placarding in cases of unreasonable carelessness and disregard of the public interest should be enforced. The value of general placarding is not apparent and is not recommended as a procedure that will materially lessen the number of cases.

Sprays and gargles are subjects, concerning the efficiency of which in disease prevention, there exists a wide difference of opinion, and I am here going to quote from the influenza bulletin of the American Public Health Association the conclusions arrived at by the editorial committee, "Sprays and gargles do not protect the nose and throat from infection for the following reasons:

a. So far as the knowledge of the Committee extends, no germicide strong enough to destroy infective organisms

can be applied to the nose and throat without, at the same time, injuring the mucus membranes.

b. Irrigations of the nose and throat to accomplish the complete mechanical removal of the infective organism is impracticable.

c. Their use tends to remove the protective mucus, to spread the infection and to increase the liability of actual entrance of the infective organisms.

d. Their domestic use is liable to lead in families to a common employment of the same utensils.

We now come to consideration of the second preventive principle, namely, the use of vaccines. The evidence existing in regard to the efficiency and lack of efficiency as a preventive measure is very contradictory and, at this writing, I cannot say that I am convinced of their value as a general preventive measure. I believe it correct to say that vaccines for the prevention of this disease are still in an experimental stage, and while we should not condemn their use, neither do I feel, as physicians and health officials, we should indorse general vaccination. There is such a thing as being too conservative along this line, and we should be careful not to deserve the remark made by Dr. Woods Hutchisson last winter, "That the motto of the Medical Profession seemed to be: "Never use anything until it has been thoroughly tested out." We should all bear in mind that it is only by using vaccines in a controlled manner in order that reliable deductions may be made as to results that we will be able to demonstrate their value.

If we believe the cause of the epidemic to be an unknown organism or virus, it is not reasonable to suppose that the disease can be prevented by a vaccine made from organisms with which we are now familiar.

Here let us quote the recommendations of the Editorial Committee of the American Public Health Association in regard to vaccines:

"Your Committee recommends that until such time as the efficacy or the lack of efficacy of prophylactic vaccination against influenza is established, vaccine if used, should be employed in a controlled manner, under conditions that will allow a fair comparison of the number of cases and of deaths among the vaccinated and non-vaccinated groups. Particular attention should be directed to securing data as to the period in the epidemic at which vaccinated and non-vaccinated persons develop the disease. Your Committee is of the opinion that the indiscriminate use of stock vaccines against influenza, and influenza and pneumonia cannot be recommended. Nothing in these recommendations should be interpreted as discouraging the use of pneumococcus stock vaccine against lobar pneumonia."

Experience has taught us that while we may carry out most rigidly the preventive measures that we believe to be of value, we cannot expect to escape the epidemic itself. The presence of influenza to the extent of the number of cases we had last fall creates a problem of no mean proportions for the Health Officer, and it is under very difficult conditions that he must carry out his relief measures.

We have all been benefitted by the recent epidemic, at least in one way, for we have all gained knowledge concerning the organization of disease fighting forces in times of stress.

All forces of this nature should combine their resources with the Health Department as the center of activities,

and with the Health Officer practically the directing head of this combination. If schools are closed in many instances you will be furnished with visiting nurses and will be able to use the teachers as nursing aids, who can render invaluable service and undoubtedly save many lives. A visiting nursing staff should be established and these nurses should work out of the Health Department office. Each morning the case reports should be districted and a list furnished the nurse assigned to that district who visits these patients selecting those who need hospitalization, those who need home helpers and nursing aids, reporting to the office those without medical attention, and those without food and the necessaries of life. By such a system health education is carried directly into the home. The patients and their families are taught at first hand isolation of the patients, prevention of spread, and care of the sick.

The assistance that can be rendered by the local chapter of your Red Cross in such an emergency cannot be overestimated. There should be the closest possible co-operation between this organization and the local Health Department. The Red Cross can be expected to furnish all your home helpers and nursing aids as well as organize a motor corps for the transportation of your visiting nurses, thereby enabling them to cover a great many more cases than otherwise would be the case.

In addition to the above the Red Cross can furnish all the masks, pneumonia jackets and sick-room supplies, such as hot water bottles, ice bags, etc.

Hospitalization is practically always a problem requiring a great deal of thought, and generally speaking, in this disease, I believe home treatment is preferable if medical, nursing, and other facilities are adequate, but in many cases you will find hospital care absolutely necessary and provision must be made for this care. It is usually more practical to expand existing hospital units than to attempt to establish, equip and organize an emergency hospital.

Our recent epidemic demonstrated more clearly than anything else could possibly have done, the weakness and shortcomings of our present Public Health machinery. It showed how the people have handicapped their Health Departments by insufficient appropriations, thereby causing poor organization, lack of personnel and facilities to conserve human life. Most of us believe that the most important step that can be taken toward better health protection is to provide for the appointment of full time health officials at an adequate salary for an indefinite period, and absolutely free from political control.

I cannot resist the temptation to quote here the results of an investigation conducted by Dr. Lee Frankel, President of the American Public Health Association. Dr. Frankel writes as follows:

"The measure of the importance which a community lays upon its health is possibly best evidenced by the amount which it is willing to pay, or has been educated to pay for the services of its health officer. To ascertain this amount, I recently sent a questionnaire to seven hundred and eighty-six health officials in the United States and Canada. Replies were received from four hundred and seventeen, these replies have been recorded and tabulated. The average competent stenographer can readily earn $25.00 per week. A good butcher probably earns more. In the skilled industries wages above this amount are any-

thing but infrequent. None of these trades require unusual training, nor do they carry with them any important responsibilities. Compared with these what tale is told by the salaries, or rather wages, paid to the average health officer? Of the four hundred and seventeen men who reported, 60 per cent receive under $25.00 per week. Of the total only 36 per cent are full-time health officers. The average salary for the entire group was $1383.00 per year. Only eighty-six out of the four hundred and seventeen officers were appointed under Civil Service rule. Of these only forty were appointed for indefinite terms based on good conduct. Fifty per cent of all the men were appointed for less than two years. In cities over two hundred and fifty thousand population in which the complexities of the health problem, in particular, demand continuity of thought and action, only ten out of twenty-two officers were appointed for indefinite terms.

Communities must learn that the position of health officers is of equal, if not of greater importance and dignity than that of any other official. Upon the physical health of the community depend its mental and moral health. Health work must be dignified commensurately with its importance. Health Administration can no longer be the football of politicians. To attract the best men with training and experience, positions must offer permanency, and appropriations which will permit of constructive and intelligent activity.

The world has been in revolution. A return to the old order of things is impossible. If we are to move along in the new order which, unless all signs fail, will be a big and better order, we too, must enter the era of reconstruction and reorganization.

We should demand that the morale of every local and state organization be raised to the highest standard possible, and be safe from political, personal, or other petty disturbance, so that public health service shall offer a secure career to those who make it a life work and invite the best medical men and women from a scientific, social and humanitarian point of view, to dedicate themselves to it. We should re-organize health work so that the health officer shall no longer deem it necessary when he meets his professional brethren to say, apologetically, "I am a Health Officer," but it shall become an honored, as well as an honorable career.

Let us take up our task joyously, whole-heartedly and enthusiastically.

THE COMMANDMENTS GOVERNING THE RELATION OF THE PUBLIC WITH THE DOCTOR

The medical society of Frankfort, Wisconsin, has elaborated ten commandments or rules to govern the relations of the public to the doctor. These rules have been printed and the doctors are asked to distribute them among their patients and to post them in their waiting rooms. The rules are as follows:

1. Do not call the doctor unnecessarily for trival illness, and do not wait

too long in the case of serious illness or until the illness has reached such a stage of severity that it is imperative to call the doctor. Much valuable time may be lost by delay in securing medical assistance.

2. If your condition permits, consult the doctor during his office hours and do not ask him to come to you. Some examinations can be made only in the doctor's office, where certain instruments which cannot easily be transported are kept.

3. If you have decided that you will call the doctor, inform him to that effect before he leaves his home to make his calls; that is, before 9 o'clock in the morning. The doctor must lay his plans for the day's work ahead of time, and if you wish to assure yourself of an early visit, send in an early call.

4. Do not ask the doctor to call at a certain hour, but leave the time for making a visit to him, if your case is not urgent or not an emergency case which demands an immediate response to your call. The doctor is never master of his time, and it is very difficult for him to make a visit at a certain time. The business man should not expect his doctor to time his call at the noon hour when the former can leave his business and be at home. If he cannot consult the doctor during office hours, he should go home and remain there until the doctor can come to see him.

5. Do not ask the doctor to come immediately when it is not necessary. Such a visit, being an emergency visit, is combined with great inconvenience and loss of much time, as it interferes with other work. At the same time, other patients who should be visited first are slighted thereby.

6. Never call the doctor at night except in an emergency case. The doctor is human, and like every other man must have his rest. A tired, worried and overworked doctor, one who is frequently disturbed in his sleep, naturally cannot render such efficient service to his patient as he could if his rest were not broken so much.

7. On Sunday the doctor should be allowed to rest. No demand should be made on his time, except when his services are absolutely needed.

8. If a doctor is needed to answer an emergency call, please do not notify more than one man at the same time. If, in the confusion of the moment, more than one doctor has been called, countermand multiple calls as soon as possible.

9. When the doctor is expected, please have everything ready for him so that time will not be lost. Above all things, do not expect the doctor to wait to see you, but have your room and yourself in readiness to receive him. Have water, soap and towel in readiness for him, likewise pen and ink and anything else that might be needed by him, to avoid delay.

10. Do not detain the doctor unnecessarily during his office hours. Other patients are waiting to see him, each in his turn, and lost time may be a valuable item for them. Furthermore, other patients are awaiting the doctor at their homes. Female patients should be prepared to submit to any examination with as little loss of time as possible, and be so dressed that they can leave the office quickly and without the assistance of a maid.—Jour. A. M. A.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., October, 1919.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription . . . . . $1.50 per year
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—Robert J. Reed, Wheeling, W. Va.

FIRST VICE-PRESIDENT—J. Frank Fox, Bluefield, W. Va.

SECOND VICE-PRESIDENT—S. M. Mason (deceased), Clarksburg, W. Va.

THIRD VICE-PRESIDENT—C. M. Hawes, Huntington, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A. FOR 1918-1919—F. LeMoyne Hupp, Wheeling, W. Va.; Alternate—Henri P. Linz, Wheeling, W. Va.

DELEGATES TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg, W. Va.; Alternate—W. W. Golden, Elkins, W. Va.

COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; H. P. Linz, Wheeling, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; L. H. Forman, Buckhannon, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; J. E. Rader, Huntington, W. Va., two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, W. Va., one-year term; E. H. Thompson, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—H. L. Goodman, Charleston, W. Va., one-year term; Charles O'Grady, Charleston, W. Va., two-year term.

WILL THERE BE A RETURN OF INFLUENZA?

There is at present a great deal of questioning on this subject. The various medical publications which come to our notice seem to be of the opinion that when the cold weather arrives and persons congregate indoors with lack of ventilation, there will be a return of this disease. From experience gained in previous epidemics this is to be expected.

It has seemed a good idea to publish in the Journal this month the essays on Influenza which were read at this year's meeting of the State Association. These, with the exception of Dr. Vest's, which appeared in a recent issue, comprise the contributions from our members on the subject.

The results of a great many bacteriological investigations of Influenza, made by a great army of workers, shows that the Bacterial picture is in no wise a uniform one.

Then comes the question as to the mode of transmission of the disease. Upon this point too, there is a lack of unanimity of opinion. It would seem that some investigations reported after experimentation by the A. S. P. H. S.

refute the theory that it is transmitted by the secretions of those in the early acute stages of the disease. A negative Wassermann may not be correct always, so it should be that we do not feel too confident that transmission in this manner is not possible.

In view of the possibility, yes, probability, of a return of Influenza, we should certainly go over the experiences of last winter and begin to prepare to meet this emergency in the very onset of invasion.

Any reports or communications on the subject will not only be received gladly but are earnestly requested.

YOUR COUNTY SOCIETY

The doctor's vacation season is over and as another year's work is begun, it is a matter of vast importance that we consider the far greater responsibilities that will hereafter rest upon us in upholding the honor and maintaining the efficiency of our profession. The health insurance scheme, the increase of quackery and nostrums and other evils are threatening the standing, if not the very life of our profession as an honorable and serviceable body. We therefore urge the taking up of our various county medical societies' work at once and with greatly increased attendance, interest and efficiency, and that a determined, well-planned, persistent effort be made to bring into the society every qualified and honorable practitioner within the society's bounds. We must have a far more thoroughly organized profession if we are to overcome the evils that threaten us.

We also urge prompt reports to the Journal of every meeting held. Otherwise we shall be tempted to infer that little is being done that is worth reporting. Most of the societies elect officers in October. We ask them to elect reporters who will report. That office is not a mere honor conferred to please the one selected; it is next to that of secretary the most important, and a good report of a society that is doing good work reflects honor on both him and his society. During the coming society year we ask our readers to scan their society's record as it appears in the Journal, and to endeavor to give their reporter something to report that will show that the society is alive and doing its duty—increasing its members' scientific knowledge and transacting its business in a business-like way.

We urge these matters knowing that we have a State Society whose record we have abundant cause to be proud of, but whose future depends largely upon the character, work and efficiency of our county medical societies.—Ed. N. J. M. Jour.

UNITED WE WILL STAND

Often it has been urged in the Journal that our profession is not getting the membership of the county societies to the top-notch. It seems that the editors of other State Journals have been worrying over these same matters as is evidenced by the above from our sister Journal of the New Jersey Medical Society.

All of us realize that all over the world there is a spirit of unrest. It seems that all of humanity is rousing as from sleep and beginning to look about. No one is satisfied with things as they are or have been. It is well that this is so for otherwise there would never be any advancement. Still there is danger of great disaster overtaking us, if we are not on guard. The various organizations and combinations not only of labor but of capital as well seem for

the time to be in more or less of a chaotic condition. Each trying selfishly to make all the others of the citizenry give of its rights and privileges that their particular Eutopian plans be realized.

Physicians have always gone ahead with the day's work and because, as a whole, they have been members of a profession whose sacred tenet has been service to their fellow men, they have felt it degrading or unprofessional to organize for the purpose of gaining material ends.

Many bills are now being presented to various law-making bodies dealing with various phases of the Public Health. Some styled Workmen's Compensation Acts; others for plans of Health Insurance, et cetera. These matters are of vital importance to our profession. It is a time of great gravity to Medicine. Unless we have the very strongest union of our whole membership and act forcefully not only will great handicaps be laid upon us but much unwise legislation done which will not give the individuals of society as a whole the best of our knowledge and skill.

Had every eligible physician in West Virginia been in the County and State Organizations and had we worked as unitedly as the various unions and brotherhoods, we cannot but feel that our Workmen's Compensation Act would have differed quite materially from what it is. Surely the medical profession of West Virginia has much to complain of regarding the workings of this law in its administration. One has but to attend an annual meeting to learn of this. Still are we not to blame ourselves that we have no greater part in the framing of this act? Try to pass an act setting a price upon the services rendered by bricklayers, machinists or the Brotherhood of Railway Trainmen without consulting them and see what would happen.

The time is approaching when the annual election of officers for the local societies takes place. Let me beg of you to elect men who will work faithfully to make your society strong. Then let us all go after every man in the county who is eligible and get him into the fold. The suggestion of the New Jersey editor to have a reporter who will report seems to me an excellent one. Just note how few county society reports our Journal has had in the past year.

Unless the medical profession does awaken and proceed rapidly to develop a strong and aggressive spirit, it is going to very shortly find itself traversing very rough seas.

No better way to begin can be thought of than to elect strong officers and increase our membership to its full strength, which means every physician of good standing in the State. Then work industriously not only to increase our scientific attainments and so our value as physicians, but as well, to guard our rights.

We must develop some business ability as well as scientific.

Announcements and Communications

DAVIS MEMORIAL HOSPITAL
ELKINS, W. VA.

September 8, 1919.

Dr. J. R. Bloss, Editor
State Medical Journal,
Huntington, W. Va.

My dear Dr. Bloss:

Am sure you will find the enclosed letter very interesting and believe that

the readers of our Journal will also find it of interest.

Sincerely yours,

WWG/W WM. W. GOLDEN.

* * *

THE DEPARTMENT OF PHYSIOLOGY
HARVARD MEDICAL SCHOOL
BOSTON, MASS.

September 2, 1919.

Dr. W. W. Golden,
Elkins, W. Va.

My dear Dr. Golden:

Let me thank you most cordially for your reprint of the paper on shock published in the West Virginia Medical Journal. It was a great pleasure when I returned to my desk today and picked up the Journal to find that there was at least evidence of open-mindedness toward the new evidence as to the nature of traumatic shock. I wish with you that there had been more time to discuss the "pros" and "cons." That would have required in the cases cited by Crile so much time that I could not enter on a discussion, but had to appeal, as he did to some degree, to authority.

It has always seemed to me that surgeons were extraordinarily ready to swallow without critical judgment the fundamental assumption in Crile's anoci-association that a degree of anesthesia which abolishes the discharge of afferent impulses from the central nervous system does not abolish afferent im pulses, and this despite the fact that the patient is unconscious of the effects of afferent impulses and that experimental evidence exists that such anesthesia as will abolish reflexes will also check the movement of nerve impulses from the periphery to the brain.

The recent evidence that ether has an effect in increasing capillary permea bility, a condition which is undoubtedly at the basis of the loss of blood volume in shock, seems to me to place an entirely new interpretation on the shock which may follow prolonged anesthesia by ether, and on the difference between results obtained when ether is given in connection with "shocking" operations and results obtained when the same operations are performed under nerve blocking (Crile's case) or nitrous oxide and oxygen.

It is obvious that there will be rather a stiff fight before evidence for traumatic toxemia is accepted, but I sincerely believe that underlying traumatic shock, surgical shock, the shock from burns, the shock from intestinal obstruction, as well as anaphylactic shock, there is fundamentally an injury to capillary walls with extravasation of fluid and loss of blood volume which leads in turn to low pressure and secondary damage. In time we may have these ideas thoroughly threshed out.

Again thanking you for sending me the paper, I am

Yours sincerely,

W. B. CANNON.

U. S. CIVIL SERVICE COMMISSION
WASHINGTON, D. C.

September 10, 1919.

The Editor.

Sir:

The Commission requests that you assist it in filling a number of administrative positions under the recently created Interdepartmental Social Hygiene Board, by inserting the following in your Journal as an item of news.

Your co-operation will be appreciated.

By direction of the Commission:

Very respectfully,

MARTIN A. MORRISON, President.

GOVERNMENT WANTS WORKERS IN VENEREAL DISEASE CAMPAIGN

The recently created Interdepartmental Social Hygiene Board of the United States Government is in need of a number of specially trained men and women to complete its organization. The United States Civil Service Commission has announced examinations for the following positions: Chief of division for scientific research, $3,500 to $4,500 a year; chief of division for educational research and development, $3,500 to $4,500 a year; educational assistant, $2,800 to $3,600 a year; chief of division of relations with States, $3,500 to $4,500 a year; chief of division of records, information and planning, $3,500 to $4,500 a year; supervising assistant and inspector, $2,800 to $3,600 a year; field agent, $1,800 to $3,000 a year. All positions are open to both men and women.

Applicants for these positions will not be given scholastic tests in an examination room but will be rated upon their education, experience, and writings. Published writings of which the applicant is the author will be submitted with the application. For most of the positions a thesis on one of a number of given subjects will be accepted in lieu of published writings. The receipt of applications will close on November 4. Detailed information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board at the post office or custom house in any of 3,000 cities.

The law creating the Interdepartmental Social Hygiene Board provides for the co-operation of the War and Navy Departments and the Public Health Service of the Treasury Department for the prevention, control, and treatment of venereal diseases. The duties of the Board as set forth in the act are (1) to recommend rules and regulations for the expenditure of moneys allotted to States for the use of their respective boards or departments of health in the prevention, control, and treatment of venereal diseases; (2) to select universities, colleges, or other suitable institutions which shall receive allotments for scientific research for the purpose of discovering more effective medical measures for the prevention and treatment of venereal diseases; (3) to recommend such general measures as will promote correlation and efficiency in carrying out the purposes of the act; and (4) to direct the expenditure of certain moneys appropriated by the act.

The Rockefeller Institute has received the following letter from the Surgeon General of the United States:

OFFICE OF THE SURGEON GENERAL
WASHINGTON, D. C.

The Director and the Trustees
of the Rockefeller Institute
For Medical Research,
66 St. and Ave. A, New York, N. Y.

Dear Sir and Gentlemen:

During the war which is now happily past, your Institute proved to be one of America's strongholds. I am informed that from the beginning to the end of hostilities the entire institution was placed by you at the disposal of the War Department and that you did work of the greatest value, not alone for the Medical Department but for the Chemical Warfare and Air Service; that your hospital as well as your laboratories became in effect as much a part of the

Army as the hospitals and laboratories established by the War Department in our cantonments.

I have also been informed that this great work, extending over the whole period of our participation in the war, was paid for entirely out of your own funds, and was without further support from the Government than the routine payment of salaries of such members and assistants of the institute as became part of the Medical and Sanitary Corps.

I thank you for your work of patriotism and your generosity in placing so fully at the disposal of the Medical Department your great and productive facilities for research, for teaching, and for the care of the sick.

Very sincerely yours,
(Signed) MERRITTE W. IRELAND,
Surgeon General, U. S. Army.

State News

The West Virginia Hospital Association will hold a meeting December 10th and 11th at Parkersburg. The first session will open at 1 p. m., the 10th, closing at noon the 11th.

Dr. S. H. Post, of Clarksburg, has changed his location to Volga, Barbour county.

Four of the board of five nurses' examiners have been named by Governor Cornwell, according to announcement made recently. They are Dr. Harriet B. Jones, Glendale; Dr. Fred L. Hupp, Wheeling; Dr. C. S. Hoffman, Keyser, and Dr. B. S. Preston, Charleston. The appointments are for a term of three years. The next examination of nurses will be held in Parkersburg next month.

The members of the retiring board are Dr. J. E. Cannaday, Charleston; Dr. E. S. Bibbis, Wheeling; Dr. J. McKee Sites, Martinsburg; Dr. C. M. Scott, Bluefield, and Dr. A. K. Kessler, Huntington.

Dr. Lewis McNeer, of Dante, Va., spent some time recently in Huntington with his family.

Dr. W. A. Cunningham, of Blue Jay, was a visitor in Huntington in September.

Dr. Eugene Davis, of Charleston, W. Va., recently received his discharge from the Army after military service of more than a year's duration. Dr. Davis has recently been appointed to a position in the Public Health Service and his new activities will extend over the States of Virginia, West Virginia, and Maryland; also District of Columbia. Dr. Davis had quite a serious illness during his army service but has fully recovered and is now in excellent health.

Dr. Ray Kessel, of Ripley, has returned from overseas service and resumed his practice.

Dr. W. S. Stille, of Parkersburg, died August 26th, after an illness of three months.

Dr. Harry L. Robertson, of Charleston, W. Va., who has had several months service with the Canadian Army in France and England, has recently been discharged and has returned to the United States. After taking a postgraduate course, he expects to return to his old location in Charleston.

Dr. J. S. Shafer, of Cannelton, W. Va., has recently returned to the United

States after twelve months of foreign service with the United States Regulars and Marines. Dr. Shafer was in France at the time of the great German offensive of more than a year ago, and was in the thick of much of the heavy fighting of the spring of 1918.

Dr. L. C. Covington, of Charleston, W. Va., has been discharged from Army Service and has resumed his practice as a specialist in eye, ear, nose and throat work. Dr. Covington has been in the service for more than two years. For several months he was Chief of the Division of Head Surgery in the Base Hospital in Deming, New Mexico. He later was given a special course in Neurological Surgery in New York City, and was made Commanding Officer of Base Hospital No. 141. After the armistice was signed, he was assigned to duty in the office of the Surgeon General as Chief of the Division of Head Surgery and later on had charge of that Department in the U. S. General Hospital, Ft. McHenry.

Dr. H. H. Young, who was discharged from the Army early last spring, after spending the summer on his farm in Putnam county, has recently returned to Charleston and resumed the practice of his specialty, eye, ear, nose and throat. He is associated with Dr. P. A. Haley.

Dr. G. C. Schoolfield has returned to Charleston after a six weeks' motor trip through the eastern states.

Mr. James H. Young, brother of Dr. H. H. Young, of Charleston, and formerly superintendent of the Charleston General Hospital, recently died at his home in Covington, Ky.

Dr. Asa W. Adkins, formerly of Griffithsville, has been appointed chief medical officer of the Huntington schools, with Dr. Nellie Yost as assistant. Miss Carnilla Norton was appointed district nurse.

Dr. E. R. Haynes, who has been located at Quincy, where he was medical inspector of Cabin Creek District, has moved to Chelgan.

Dr. Emmett, of Richmond, Va., has opened offices in Huntington, where he will be associated with Dr. R. J. Wilkinson.

Dr. J. A. Stuckey, of Lexington, Ky., was entertained by Dr. and Mrs. T. W. Moore, of Huntington, during the meeting of the Kentucky State Medical Association, held at Ashland in September.

Dr. and Mrs. Jas. R. Bloss, of Huntington, are in New York on a two weeks' vacation. Dr. Bloss will do some work at the New York Post-Graduate Medical School and Hospital, while away.

Dr. and Mrs. L. T. Vinson, of Huntington, motored to Pittsburg and Philadelphia in September.

Dr. and Mrs. R. V. Shirley, of Ceredo, were recent visitors in Jefferson county.

Miss Clara D. Noyes, Director of the Bureau of Field Nursing Service of the American Red Cross, which assigned approximately twenty thousand American nurses to war service, has been appointed Director of the Department of Nurs-

ing, to succeed the late Miss Jane A. Delano. Miss Noyes has been Acting Director since December, 1918.

Miss Noyes has had long experience in administrative nursing activities, both with the Red Cross and outside. A graduate of the Johns Hopkins Training School, she was for some years Superintendent of Nurses at the Hospital for Women and Children, Boston, Mass., and later Superintendent of St. Luke's Hospital and Training School, New Bedford, Mass., leaving there in 1910 to become General Superintendent of Bellevue and Allied Hospitals Training Schools, New York City.

She was President of the National League of Nursing Education from 1913 to 1916 and President of the Board of Directors of the American Journal of Nursing from 1913 to 1919. She became affiliated with the Red Cross in 1916, as Director of the Bureau of Nursing, under the Department of Military Relief, where she organized the nurses for the first base hospital units and standardized the making of surgical dressings, a work later transferred to the Bureau of Chapter Production. Upon America's entry into the war, the Bureau of Nursing was unable to meet its tremendously increasing activities, and in 1917 the Department of Nursing was created, and Miss Noyes took charge of the assignment and equipment of all Red Cross nurses for Army, Navy and Red Cross service in this country and overseas.

Miss Noyes, whose home is in Lyme, Conn., has been decorated with the Patriotic Service Medal of the American Social Science Association, and the Council of the National Institute of Social Sciences. She is now President of the American Nurses' Association.

The physicians of Tauntain, R. I., have voted to raise their schedule of fees. House calls have been raised from $2 to $3, with $4 for visits between 6 and 10 o'clock in the evening, and $5 from 10 at night to 7 in the morning. Office calls will be $2 and telephone calls will be charged as office calls. The Taunton doctors claim that they are compelled to take this step to meet the increased cost of living.

Press dispatches announce that Liverpool physicians have adopted a resolution in favor of organizing on a trade union basis.

Society Proceedings

The Mercer County Medical Society met in the Chamber of Commerce, Bluefield, West Virginia, August 21, 1919. The minutes of the last meeting were read and adopted. Dr. W. H. St. Clair was acting President.

Under the clininal cases, Dr. Harry G. Steele reported an unusual mass of symptoms in Obstetrical work, in which he used 20,000 units of antistreptococcus serum, and he reports that he found his patient very much improved in the morning. He also reported a case of Infantile Paralysis.

Dr. J. R. Vermillion was to have read a paper on how to improve our Society. Dr. Vermillion was not present, but the paper was freely discussed, and many valuable suggestions were made.

It was decided that we return to our luncheon, and to prepare the surgical and clinical cases for next meeting.

There being no further business before the Society, we adjourned.

E. H. THOMPSON, Secretary.

RESOLUTIONS OF THE MERCER COUNTY MEDICAL SOCIETY

Mercer Healing Springs, W. Va.,
July 17, 1919.

Whereas: The Great and Supreme Ruler of the Universe has, in His Infinite Wisdom removed from among us, one of our worthy, esteemed, and loveable practitioners, Dr. T. Henry Becker, of Bluefield, W. Va., and

Whereas, The long and intimite relation held with him in the faithful discharge of his duties in this Society, and as a congenial and conscientious practicing physician among us, makes it eminently befitting that we record our appreciation of him. Therefore, be it

Resolved: That, his knowledge as an expert anesthetist and X-Ray specialist will always be remembered by the members of this Society with the highest gratitude; that his article on anesthesia will go down in the history of the Mercer County Medical Society as one of the best papers ever read by any of its members, and his knowledge as an excellent practitioner was well recognized by all who knew him; be it further

Resolved, That we feel the sudden removal of such a jolly good fellow from our midst can never be replaced and leaves a sad vacancy in this Society long to be remembered, and at the same time is a great loss to his family, patients, many friends, and to the community in general; be it further

Resolved, That we extend our deepest sympathy to the family of the deceased; be it further

Resolved, That a copy of these resolutions be spread upon the minutes of the secretary's book, that they be printed in the West Virginia Medical Journal, that a copy be sent to the wife and children, and that a copy be sent to the Bluefield Public Telegraph for publication.

A. D. WOOD,
H. G. STEELE,
E. H. THOMPSON,
Committee.

Medicine

THE ONION

The scientific world is coming to recognize in the onion a thing of great food value; in it are found some of the most valuable and tonic mineral salts in the vegetable kingdom. Onions are supplied raw to the troops in France. People always ate onions to break up a cold. Cooked onions are sedative and laxative. Onions are known as a cure for insomnia and are useful in rheumatism. Nothing will relieve acute bronchitis and dyspnea so quickly as the old-fashioned onion poultice. Onions are easily digested, nourish, stimulate the appetite, soothe the nerves and act as a mild diuretic. They contain sulphur and other elements which act as intestinal antiseptics.—Ibid.

PREGNANCY AND ITS COMPLICATIONS

Balard, P.: The Permanent Hypotensive Action of Blood-Letting in Eclampsia (De l'action hypotensive durable de la saignee dance l'eclampsie gravidique). Compt. rend. Soc. de biol., (Par., 1918, lxxxi, 787.

The French obstetrical practice has always utilized blood-letting as a heroic method of treating eclampsia. In studying the evolution of oscillometric values in obstetrics, variations have been noted

following blood-letting in the course of eclampsia and the severe albuminurias of pregnancy.

The author gives a tabular statement of 9 of the most complete of these observations. These show that blood-letting in eclampsia causes an immediate and lasting fall in the maximum and minimum oscillometric values. The amount of the fall does not depend on the quantity of blood withdrawn. In the cases which the author reports, the immediate fall in pressure was regularly continued during the days following. The immediate reduction of tension shows the diminution of the work of the heart.

Contrary to older ideas, blood withdrawals of a medium grade, 500 grams, suffice in eclampsia to cause an immediate and lasting fall of the arterial pressure in elevated hypertension of the renal type, as well as a diminution of the work of the cardiac muscle.

This permanent hypotensive action fully justifies the confidence which obstetricians have always placed in blood-letting as a treatment of eclampsia.

HEALTH INSURANCE

There seems to be no let up on the agitation of compulsory health insurance. There does seem to be a little less assurance that it is wanted in America. In fact, no one seems to be quite positive that it is a necessity except the "welfare" workers. Mr. Gompers of the Federation of Labor does not seem to think it necessary, and does think it has dangers even for the workmen whom it is designed to benefit.

The idea seems to have originated in Europe, and does not seem to have been either popular or beneficial there, if we can rely on those who have witnessed its working across the water. Yet there seems to be a very strong effort to force it upon us here by those societies that are interested in the enactment of the so-called model health bill.

With all the agitation upon this subject during the last year, but few seem to know just what it means or what it will include, and few if any aside from the large employers of labor seem to understand that it will be another burden for the taxpayer, as it is designed that at least 20 per cent of the cost will come from the general tax fund. The farmers, the small business men, the professional men, who are not employers of labor and who are in no manner benefited, will pay at least 20 per cent of the burden.

The proposed bill is so complex and difficult of understanding that few have really gone into its provisions. The medical provisions, or at least the medical fee table, so far as we know, has not yet been written into the bill, and those interested are not inclined to talk much on this feature.

We feel that the underlying principle is paternalism, originated by that class of organizers who have been interested in other charities (so-called). Paternalism and pauperism are very closely associated in our mind. In fact, there can be no excuse for one without the other. The United States is not the home of either, and we feel neither should be tolerated in a free liberty-loving republic.—Jour. Med. Soc. N. J., April, 1918.

A METHOD OF DELIVERING THE PLACENTA

JOSEPH L. BAER, M. D., Chicago

Associate Attending Obstetrician and Gynecologist, Michael Reese Hospital.

I desire to present a procedure for the expulsion of the placenta. Physicians in general have accepted the dictum that the third stage of labor should be allowed to develop naturally, and that no attempt should be made to express the placenta until separation has occurred, provided there is no hemorrhage.

The interval between the birth of the child and the moment of expression of the placenta is still being handled in different fashion, according to the teachings of various clinics, ranging from the absolutely let alone policy of Leopold, who insists that the abdomen should be left untouched following the birth of the child, if need be for twenty-four hours, leaving the expression of the placenta absolutely to the natural powers of the woman; to the other extreme, which consists in grasping the fundus, and as soon as contractions have appeared or have been called forth by message, to express the placenta. Omitting a critical consideration of the merits of these various procedures at this time, and limiting myself to a discusion of the act of expulsion, I think the consensus of the best obstetrical opinion of today, in this country at least, is that after a suitable period of waiting, which averages half an hour, the uterus having undergone sufficient contractions, the placenta being separated and lying in the lower uterine segment, it is then permissible to grasp the fundus directly over its center, and the uterus being in contraction and in midline, to express the placenta.

In skilled hands, with a proper recognition of the risk of too much traumastism resulting in a meritis, and of rupture of a pus tube by grasping the fundus laterally instead of centrally, this procedure is entirely without danger. However, if there is a way in which the natural powers of the woman, both voluntary and involuntary, can be utilized for the purpose of expression without handling the uterus, I am sure this is preferable. All of us have seen the not infrequent cases in which the woman spontaneously expels the placenta directly after delivery, or just as we are about to express it for her. In a great majority of cases her inability to accomplish expulsion spontaneously is due to the complete loss of tone of the abdominal wall just released from its prolonged condition of overstretching. If the abdominal tone and the intra-abdominal pressure can be restored for the time being, the woman has regained her voluntary powers of expulsion.

For some time I have been accomplishing this in a very simple way. After the usual period of waiting, averaging half an hour, and when the uterus is at the height of a contraction, as evidenced both by feeling it and by the pain the woman is experiencing, I grasp the abdominal wall crosswise above the fundus and pull the rectus muscles together, thus taking up all the slack. I then encourage the woman to bear down, and in practically every case in which expression on the fundus would have succeeded, this procedure has succeeded. If then there should be adherent membranes, they are treated in exactly the same fashion as following any other method of expression. The advantage claimed for this procedure is ja total avoidance of handling or pressure on the uterus, and I believe that any device that will help to achieve that end, and give the same result, is worth advocating.—Jour. A. M. A., May, 24, 1919.

ERGOT IN WEAK ERECTIONS, PREMATURE EJACULATION, ENURESIS, ETC.

In certain cases of weak erections and premature ejaculation, particularly if dependent upon a congested posterior urethra and an atonic or congested prostate, the effect of ergot is sometimes remarkably good. Try it. You know that I do not put all my faith or my chief faith on drugs. But when I do use drugs I pay very little attention to pharmacopeial or textbook dosage. I find out my own doses and give "until effect" or until I am sure that the drug is not indicated in this condition. And it is no use giving extract of ergot or ergotin or any so-called active principles of ergot. The only thing that will do is a good reliable fluid extract of ergot, in doses of 30 to 60 minims, three times or even four times a day.

And I might say that in some cases of bed-wetting, ergot is also more effective than any other drug in or out of the pharmacopeia. I also use it in the dribbling of urine of old men, but there I usually combine it with small doses of strychnine and minute doses of tincture of cantharides or cantharidin. —Critic and Guide.

DUODENAL DIABETES—AN EXPLODED FALLACY

The introduction of the expression "duodenal diabetes" into the literature of medicine is due to the late German physiologist Eduard Pfluger of Bonn. Having observed that section of the intramesenteric nervous connections between the pancreas and duodenum in the frog may, under certain circumstances, give rise to a glycosuria, he called into question the existence of a pancreatic diabetes. Minkowski subsequently silenced this charge against what had been regarded as an established demonstration, by a successful experimental extirpation of the duodenum without producing a state of diabetes so long as a portion of pancreatic tissue was left intact in the body. Doudenectomy is, however, a dangerous procedure; and, since scarcely any cases of prolonged survival of the subjects are on record, the possibility that the dudenum is indispensable for physiologic wellbeing has remained to be definitely considered. Thanks to the ingenious operative procedure described by Moorhead and Landes in a recent issue of The Journal, complete removal of the duodenum in consecutive operations is permitted. The jejunum is made to serve as a substitute for the duodenum and to receive the pancreatic and biliary secretions through transplanted ducts. The experiments made by the authors at the University of Chicago show that "dogs thus operated on will live in a normal state of health. The duodenum, therefore, is not essential to life." The outcome reminds us of the comment of von Furth of Vienna on the subject of duodenal diabetes: "Strictly speaking, nothing at all has been gained in this whole campaign fought with an array of heavy artillery of authority and between strategists of note, except the reestablishment of a fact that has long been known—the influence of nervous irritations of all sorts causes the liver to discharge its supply of carbohydrate which sometimes gives rise to glycosuria.—Jour. A. M. A., June 7, 1919.

Surgery

ILEUS FROM MURPHY BUTTON

Wettstein's three cases combined the three possible drawbacks of the Murphy button used at the gastro-enterostomy:

failure to drop out, falling into the stomach, and causing disturbance on its way through the bowel. A laparotomy was required to dislodge the button after latent periods of forty-five days, seven weeks, and over four years, respectively. He cites similar cases from the literature, and remarks that as his three cases occurred in a close series the trouble was probably due to defective buttons. Kocher's main objection to the Murphy button was that it leaves us too much at the mercy of the manufacturer. The buttons were found impacted in the bowel 25 and 35 cm. above the valve of Bauhin, and considerable force was required to dislodge them. Wettstein has abandoned the use of the button since these experiences except for cases in which every minute counts.

SUSPENSION TREATMENT OF FRACTURE OF THE THIGH

William H. Johnston (Lancet, February 1, 1919) enters into a detailed discussion of the mechanical principles associated with the various methods of suspension treatment of fractures of the femur, confirming his conclusions by accurate experimental measurements. He says that in the various methods employed the forces brought into play are often multiple and are frequently not applied directly in the long axis of the femur. The forces are eventually resolved, but by acting at a mechanical disadvantage greater weights must often be used than are really necessary. In all indirect methods of applying the reducing force three conditions must be met. First, the forces must be arranged with mathematical accuracy so that the maximum resultant is obtained in the long axis of the femur with the minimum of components. The angle of flexion of the leg upon the thigh must be the most economical one; that is, the one at which the leg will bear the strain longer and more easily, and with less tension and pressure effects than at any other. Finally, variations in this angle must be possible with a variable, but proportionate, distribution of the forces which act upon the knee and leg so that the skin is conserved. All of these requirements can be met by the use of a modification of the Hodgen splint, the precise construction and adjustment of which are described and illustrated. This apparatus permits complete freedom of movement of the leg from full extension to flexion to 90° with the thigh; the movements are so controlled that during the changes the reducing force acting upon the femur does not change; the reducing force is always applied exactly in the long axis of the femur; movements of the pelvis do not throw the system out of adjustment or alter the direction or magnitude of the forces; and anterior arching of the fractured segments is provided against. Any of the commonly used methods of applying the reducing force to the femur may be employed, but adhesive plaster can be employed with as great advantage in most cases as any other and is generally decidedly preferable on account of simplicity.

CLOSED SYSTEM OF DRAINAGE FOR PENETRATING WOUNDS OF CHEST

Marion A. Blankenhorn (Journal A. M. A., December 14, 1918) strongly recommends the use of the Brewer tube, which is selfretaining and which can be made to give an air-tight joint by means of a few strips of adhesive plaster, in the treatment of infected war wounds

of the chest with penetration of the pleura. Of course, where possible, such wounds should be treated by immediate operation and immediate closure of the chest, but in a considerable proportion of cases the conditions are not suitable for such immediate closure and it is in these that the method of closed drainage is recommended and gives the best results. The Brewer tube is inserted through an opening made by the resection of about half an inch of rib and a stab through the pleura. Its outer rubber flange is sealed to the chest by adhesive plaster and continuous negative pressure is maintained within the chest by connecting the tube with a large, deflated Pollitzer bag, or an automobile horn bulb. This plan of treatment prevents secondary infection, hastens the expansion of the lung, brings the pleural surfaces together and thus permits them to take care of the small amount of infection which remains after the primary operation and cleansing. After two or three days the lung will have become adherent and the small cavity can be irrigated through the tube without fear of causing pneumothorax.

END RESULTS IN THE TREATMENT OF UNDESCENDED OR MALDESCENDED TESTIS

Dr. William B. Coley, of New York City, read a paper on this subject in which he reported 415 cases and drew the following conclusions:

1. That in most cases of undescended or maldescended tests the etiology points to a congenital origin, often influenced by the element of heredity and frequently associated, particularly in the double variety, with other developmental defects.

2. While the question of the functional value of the undescended tests cannot be definitely answered in an individual case, it is probable that in a considerable number of cases, at least ten per cent, the testis retains the power of spermatogenesis.

3. The testis should rarely be sacrified, especially in children, for two reasons: a, Because of its possible functional value; b, because of the interstitial cells which are present in all cases and which have an important influence in the development of the male characteristics of the child.

4. The tendency to malignant disease is relatively considerably greater in the undescended than in the normal testis.

5. Operation should be advocated in children who have reached the age of eight or ten years, for the following reasons: a, For the radical cure of the hernia with which the undescended testis is practically always associated and which often cannot be controlled with a truss without causing pain and irritation to the testis; b, by bringing the testis down into the scrotum at this period there is a possibility of causing further and more normal development of the testis.

6. Operation in adults over the age of fourteen, should be even more strongly urged for the following reasons: a, In order to cure the accompanying hernia; b, in order to place the testis in a position in which it is much less liable to trauma thereby lessening the chances of malignant degeneration; c, for the mental and moral effect upon the patient.—N. Y. Med. Jour., February 8, 1919.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 5 HUNTINGTON, W. VA., NOVEMBER, 1919 Subscription $2.00 per Year
Single Copies 20 Cents

DIFFERENTIAL DIAGNOSIS OF PLEURISY WITH EFFUSION

By D. A. MacGregor, M. D.
Wheeling, W. Va.

Read Before West Virginia State Medical Association, at Annual Meeting, Clarksburg, May, 1919.

The importance of being able to diagnose pleurisy with effusion accurately has been brought home to many of us during the past year, in which we have had such a wide spread epidemic of bronchial and pulmonary diseases. It is a regrettable fact that a large percentage of the cases of pleurisy with effusion passed undiagnosed in the practice of the average physician. The gross mistakes are usually due to improper physical examination or lack of any physical examination at all. If the patient is properly examined any physician acquainted with modern methods of percussion and auscultation will be able to diagnose cases of massive pleural effusion. The more difficult diagnoses are found in those cases in which the effusion is slight or moderate in quantity, and accompanied by confusing pulmonary symptoms.

I feel that there is usually some degree of pleurisy associated with every inflamation of the lung itself, and usually the pleurisy is accompanied by an effusion, more or less extensive. The effusion is nature's method of separating the parietal from the visceral pleura, thereby preventing pain. In my experience I have encountered many perplexing cases following influenza, in which I felt sure that a disease process was present both in the lung itself and in the pleura, and I was not sure which process was causing the major part of the patient's trouble. There has been a large number of so-called "persistently wet lungs" following influenza—cases in which the dependent portion of the lungs have not drained out properly with expectoration, and have remained in that boggy condition for many weeks after convalescence has been established. Ordinary efforts of coughing were not sufficient to remove the

moisture from the lungs. On percussion a dull note is elicted at the base of the lungs. On ausculation the findings are the same as those of a bronchial pneumonia, with a few fine moist rales. Inasmuch as this does not clear up promptly one is tempted to infer that the symptoms indicate a more or less extensive pleural effusion, and on tapping the chest a moderate amount of fluid is found. However, its withdrawel does not materially effect the progress of the case. One of the most effective means of promoting the proper drainage of these wet lungs is to have the patient assume positions, such as will facilitate drainage by gravity. To that end patients are instructed to lean over the back of a chair with the head resting on the seat thereof, and to remain in that position for five or ten minutes two or three times each day. If the patient is confined to bed, he is instructed to bend over the side of the bed with head and chest as low down as possible, and the head resting upon a foot stool. This position is maintained for five or ten minutes two or three times a day. After maintaining this position the patient can expectorate much more freely, and the wet bases tend to improve very rapidly.

There are no hard and fast rules established for the diagnosis of pleurisy with effusion. In reading over a list of symptoms in various text books you will notice that there are flat contradictions. This is because the actual physical conditions, for which we examine the patient, are materially different in cases with a small amount of effusion from those with a larger amount of effusion.

Naturally as the patient is stripped before us for examination inspection is the first diagnostic aid. The presence of dyspnoea is usually marked in cases of massive effusion. It may not be noticed at all in those cases in which there is only a moderate effusion. The interspaces between the ribs may be enlarged and give the appearence of bulging. In fact the one side of the chest may be demonstrably larger than the opposite side of the chest. Naturally when the case of effusion is of a mild grade no such physical change is present.

I always look in these cases for the presence of Litten's diaphragm phenomenon. As you will recall the Litten sign is to be found in cases where the pleura is normal, and it is absent in abnormal cases. The Litten sign is the presence of a shadowy line passing down the lateral chest wall with each inspiration, and it indicates the line at which the diaphragm is pulling away from the chest wall, thereby producing a temporary negative pressure at that particular point. The Litten line is hard to see except in the best of light, and to display it most advantageously the patient should be lying with his feet toward the window through which the light is admitted; the chest entirely exposed; the arms being held away from the chest wall so as to expose the lateral espect of the thorax. If we see on inspection that the Litten line is present on one side and not on the other side we presume that there is or has been a disease of the pleura on the side where it is not seen, and that the pleura is normal on the side where it is seen.

After inspecting the chest we turn to percussion. I feel that the best way to elicit that absolute flatness of fluid, which is held to be characteristic of an effusion, is to use percussion by the single hand method in preference to the method in which both hands are used. In using the two hand method the qual-

ity of the note elicited is not only dependent upon the strength of the blow of the hammer hand, but it is also very largely influenced by the degree of pressure exerted by the finger of the other hand used as the pleximeter and the manner of placing it on the chest wall. In percussion by the one hand method we are able to feel the resistance met with by the fingers, in addition to hearing the note that is elicited by the blow. In using the two hand method, however, the sense of the feeling of increased resistance is not appreciated by the hand, and we depend upon the ear entirely. In actual practice I make use of both methods and compare the results obtained.

If we are examining a case of marked effusion in which practically one-half of the chest is filled with fluid and the lung completely collapsed, it does not matter how much force is used in the percussion blow. When we are trying to detect a smaller effusion, it is far better to use light percussion. If we use heavy percussion the strength of the blow is communicated through the film of fluid to the air-containing lung or the bronchi beyond and we do not get the sound of absolute flatness which the fluid itself should give. A light percussion blow will not extend farther than the depth of the fluid, and will not set in vibration any adjoining air containing parts. Therefore, it will give the sound of absolutely dullness which we expect to find over fluid. Above the level of the fluid the partially relaxed lung tissue may give a tympanitic sound on percussion. This is a noteworthy point and of considerable importance in diagnosis. A tympanitic sound found above an area where we elicit absolute flatness is practically an assurance of the presence of fluid. The tympanitic note is best demonstrated by light percussion.

By the aid of percussion certain other signs are elicited, which we may call accessory to the fact. Pleurisy with effusion, if at all extensive, may displace other organs. It may encroach upon the opposite lung. It may displace the heart to either the right or the left side. If it is on the right side it may displace the liver downward, and we may percuss and feel the sensitive border of the liver an inch or more below the costal margin. By encroachment on the mediastinum posteriorly a pleurisy with effusion will give us the so-called sign of Grocco. Grocco was the Italian physiologist who described this sign. It consists of a right angled triangular area of dullness in the para-vertebrae line, to be elicited at the base of the lung on the opposite side to that in which the effusion is found. I regard this sign as of minor importance because of the difficulty in accurately determining the triangle of dullness over the thick erector spinae muscles. Tactile fermitus is ordinarily diminished or absent in the presence of an effusion. In a case af massive effusion, however, the fluid may be under such tension that it readily transmits vibration to the hand from the large bronchi. In the same way we may expect occasionally to find bronchophony and whispered pectoriloquy. When this condition is present the condition may be mistaken for the consolidation of a pneumonia. I do not attach much significance to these signs on account of their variability.

The upper level of the fluid present in a case of effusion is also a matter of interest to the diagnostician. The upper level does not assume an absolutely horizontal line, like a water bucket, on the contrary it describes a marked

curve, the highest part of which is to be found in the axillary region when the patient is in an upright position. This curved line is known in this country as Ellis' line. In a recumbent position the fluid naturally gravitates to the lowest portion of the thoracic cavity, and this sign of shifting dullness is one of considerable importance in diagnosing pleurisy with effusion in a moderate amount. Naturally it does not apply to the massive type, in which the dullness remains constant in all positions of the body.

Passing from percussion of the chest we next turn to auscultation. We are advised by some of our reference books that breath sounds are absent over any considerable effusion. In other books we are told that the breath sounds are "distant." If we listen with a stethoscope in some instances we will not be able to hear any breath sounds at all, and in other instances we will be able to hear them very faintly, as if at a great distance. A point which we wish to emphasize most forcefully is this: That the naked ear is a better instrument to use for this purpose than the stethoscope. I believe that the naked ear is able to detect the breath sounds in all cases of pleurisy with effusion, whether large or small, providing there is not a markedly thickened pleura interposed between the ear and the lung. Furthermore the character of the breath sounds heard by the naked ear over an effusion is very distinctive, and is one of the most important points in making a diagnosis. When there is any considerable effusion the breath sounds heard are tubular in quality, and the expiratory sound is of a markedly higher pitch than the inspiratory sound. When once you have tried this particular method and noted the marked disparity in pitch between expiration and inspiration, you will always look for it thereafter, and come to depend upon it as a most valuable aid.

Lastly, I wish to call attention to a pnenomenon of the diaphragm described by Dr. C. F. Hoover, of Cleveland, O. The diaphragm is a muscular sheet forming the floor of the thorax. It occupies a high-arched position. It is fixed along its central tendon anteriorly in the region of the xyphoid, posteriorly in the region of the twelfth dorsal vertebra. Its moveable attachment is to the ribs, from the eighth rib anteriorly to the twelfth rib posteriorly. The movement of the ribs is best observed at the costal margins, as the angle between the right and left costal margins normally flares with inspiration and decreases with expiration. Every muscle or set of muscles has its antagonist, without which it has no function. The normal contraction of the diaphragm, pulling from its fixed point at the central tendon, along its high-arched course to the ribs, causes a retraction of the costal margins and a narrowing of the costal angle. The costal angle is expanded or flared by the intercostal muscles and above them the scaleni muscles of the neck. When these muscles contract they tend to elevate the throacic cage, and on account of the hingle-like attachment of the ribs to the spine, cause an enlargement of the chest lateraly, and a flaring of the costal margins. Normally the diaphragm is just slightly overpowered by the action of the intercostal and scaleni muscles in the action of inspiration. Consequently in a normal subject the costal angle flares on each inspiration; the inter-costal and scaleni muscles having the advantage of the diaphragm on account of the peculiar position which the diaphragm oc-

cupies. The musculture of the diaphragm, instead of pulling in a straight line from its origin to its attachment, pursues a curved course, and consequently it does not functionate to the best advantage. When its fibers contract they tend to assume more nearly a straight line. If we place the diaphragm in a position of advantage, that is when the high arch is depressed so that it more nearly resembles a flattened sheet, it will pull more powerfully upon the costal attachment, and thereby overcome its antagonists. If this condition obtains—if the diaphragm is placed in a position of better advantage —then we will find that the costal angle does not flare upon inspiration, or at least does not flare as much as it would under ordinary circumstances. If we place one-half of the diaphragm at a better advantage than the other half, by having it assume more nearly a straight line, then the costal margin on that side will not flare with inspiration as will the costal margin on the opposite side.

A pleurisy with effusion means that we have a collection of fluid above the diaphragm, and the weight of that fluid will naturally depress the high-arch of the diaphragm on that side. If the high arch of the diaphragm on the one side is depressed by the presence of fluid that half of the diaphragm will act to better mechanical advantage than the opposite half of the diaphragm, which is not so depressed. Therefore, we find in cases of pleurisy with effusion that if we carefully observe the flaring of the costal margin with deep inspiration, on the affected side the rib margin may remain practically stationary, whereas on the opposite side it flares normally. This sign is best elicited by the placing of the thumb of the left hand along the right costal margin of the patient, and the thumb of the right hand along the left costal margin of the patient. Allow the thumbs to follow the movement of the costal margins while the patient is instructed to breathe deeply.

I regard this sign as of very considerable importance when properly interpreted. As is the case with every other diagnostic procedure, it has its pitfalls for the unwary. A dilated heart or a pericarditis with effusion can cause the same diaphragm phenomenon that would be found in a case of left-sided pleurisy. An inflammatory process below the diaphragm may so irritate that structure that it maintains a condition of strong tonic contraction, and by so doing fixes the costal margin on that side. I can easily understand the possibility of confusing the pain of appendicitis or a gall bladder inflammation with the pain of pleurisy, and interpreting the fixation of the right costal margin as due to an effusion accompanying pleurisy, when in reality it is due to a reflex hyperactivity of the diaphragm caused by the inflammation in the abdomen. An old pleurisy which has caused adhesions between the diaphragmatic pleura and the parietal pleura will give us this same sign and may be confused with pleurisy with effusion. You will readily see that in this instance the diaphragm is firmly attached to the chest wall, at a higher point causing it to assume more nearly a straight line than it did in its normal position before the adhesions were formed. Consequently it acts at better advantage and restricts the movement of the costal margins.

It is not within the scope of this paper to enter upon a discussion of the x-ray and fluoroscopic findings in pleurisy

with effusion. Suffice it to say that the x-ray is of very material assistance and should be used as a confirmatory test whenever available. Fluoroscopic examination is of still more value than the simple x-ray picture, if it is done by a competent roentgenologist.

If after examining a patient in the way that has been outlined in this paper it seems probably that the patient has pleurisy with effusion, we are entirely justified in confirming our diagnosis by puncturing the chest with a needle and aspirating for fluid. Simple puncture of the chest, properly performed, is not a painful procedure and is not accompanied by any danger to the patient. If after the fluid is withdrawn it is found to be purulent, the only satisfactory treatment is surgical drainage by rib resection. Intercostal drainage is not a satisfactory procedure, in my opinion. I believe the removal of a small segment of two ribs, the periosteum being preserved, is the procedure of choice. If drainage is what is needed, do it thoroughly. If the fluid is not purulent in character, and the patient is not embarassed by pressure, I do not feel that an attempt to withdraw all of the fluid by aspiration is necessary. If the patient is embarassed by the pressure of a large non-purulent effusion, the withdrawal of a portion (let us say one liter) at the first sitting is the best procedure. Complete withdrawal of a massive effusion may be accompanied by very disastrous results. The lungs which may have been compressed for a considerable time before the fluid was withdrawn may not readily expand to fill the cavity formerly occupied by the fluid, and a rapidly developing pulmonary oedema may bring a fatal issue. I have in mind one such case of pleural effusion accompanying malignancy, in which the patient died within two hours after the removal of three pints of bloody fluid. This patient was under my care, and I watched the development of the fatal pulmonary oedema, and was in no way able to combat it. Another unfortunate accident that may follow the removal of a large quantity of fluid is an acute dilatation of the heart. We must remember that the heart has been working at a disadvantage under the pressure of the fluid in the chest. When that fluid is rapidly withdrawn the heart as well as the lung tissue participates in the expansion required to fill the space formerly occupied by the fluid. If there is a marked degree of myocarditis the heart may not be able to withstand this additional insult.

In closing this paper I wish to summarize the points, which are, in my opinion, worth remembering:

1. One hand percussion is preferable to the use of two hands and light percussion is preferable to heavy percussion.

2. The naked ear is a better instrument to use for this particular purpose than the stethoscope.

3. The high pitch of the expiratory sound in comparison with the pitch of the sound of inspiration is of great importance in diagnosing the presence of fluid.

4. The movement of the costal margin on the affected side is restricted when the diaphragm is depressed by the presence of the fluid above it.

5. Removal of a large amount of fluid from a massive pleurisy with effusion is not a justifiable procedure on account of the danger of cardiac dilation and pulmonary oedema.

THE PHYSICIAN'S RESPONSIBILITIES

By J. C. Irons, M. D.,
Dartmour, W. Va.

Read at the Meeting of the B. R. T. Medical Society, held at Thomas, October 8, 1919.

The great number of men unfit for army service, as developed by the examination boards, and the evident decadent physical condition of our nation, is my excuse for bringing this paper before the Society at this time.

You may remember that nine years ago this month, October, I had the privilege and pleasure of presenting a paper on Social Hygiene, in which I tried to impress upon the medical profession our duty, as physicians, in warning the people of the prevalence and dangers from venereal diseases, and suggesting that my belief was that the time would come when the ravages of this great black plague would cause the government to warn the people of the dangers of these very contagious diseases and their fearful results, just as for any other contagious or infectious disease. Decided progress has already been made. The community towel and cup have been banished from all public institutions and places where there is danger of infection, and since the fearful prevalence of this disease was made so evident by disqualification for army service, the government is taking active steps to safeguard the people from the dangers of the disease, and the greater danger resulting from the quack nostrums, so commonly used as supposed curative measures,—and the quack himself, and is seeking to educate the people as to the character, prevalence, and consequences of these diseases and the fearful results of neglectful or improper treatment.

We are startled from the records of the recent world war, by the statement that of the number of men examined 197,000 were suffering from some form of venereal disease—many of whom were wholly unfit for any service;—and that more men were invalided from service from this than from any other illness. There never was such caution used to prevent the exposure to such diseases as during the organization of our late army, and yet to my personal knowledge, except when the Flu was so prevalent, the venereal wards were the most crowded of our base hospitals. We must not forget that the reported cases are only a fraction of the whole number. There are multiplied thousands of men, women and children, the victims of this dread monster, of whom we have no statistics. Hence we are glad that the government is being aroused to the importance of this matter, and is seeking to inform its citizens, and is asking the physicians to cooperate in this campaign of education. Will we heartily respond? Circulars are being distributed, showing the devastation of this terrible malady. It is boldly stated that, excepting measles, gonorrhea is the most prevalent of all diseases, and is no respector of age, sex, or class,—the abstemious only are immune. It is the cause of from 6,000 to 10,000 cases of blindness in the United States yearly; causes 80 per cent of the blindness of the new born; is the cause of 65 per cent of the abdominal operations for women; results in 50 per cent of sterilities, to say nothing of the many other chronic diseases that play such a prominent part in the sickness, suffering and death of so many.

And yet many seem to think it some-

what a joke, or an honor (?) to have this disease, filthy and self-afflicted though it may be; and really boastingly tell about it, claiming it is of no more consequence than a "bad cold," little realizing the veritable danger with which they are carelessly playing. They usually rely upon some quack prescription, promising a prompt cure, and which not only fails to cure, but entails years of suffering, most generally upon an innocent wife, but equally great upon a helpless offspring.

The government further shows by reports that 8 per cent of the total population are afflicted by syphilis. That means, approximately, we have 8,800,000 syphilitics in this country. We know that this disease is transmitted to the offspring, resulting in the death of 80 per cent of those infected. This report further states that this disease is responsible for 10 to 35 per cent of all insanity, not to mention the mentally defective children. It is the progenitor of locomotor ataxia, paresis, apoplexy, paralysis, neuralgias, abortions, miscarriages, as well as diseases of the heart, blood vessels and other vital organs. It shortens life one-third, not to mention the suffering, loss of valuable service to the individual and to consequent loss of the productive force to the country.

This suffering, great loss of vital productive national force, and fearful incapacities and dangers to others, as well as the heavy death rate, both post and pre-natal, are preventable and most usually result from ignorance or perverted bestiality. And just here may I not ask who is most responsible for this ignorance among the masses? Who has long had the knowledge, and yet failed to impart it in a public manner?

Since reading the army statistics, I have been impressed with the number of physical and mental defectives in this country. We have, comparatively, so few perfect types of men. In some sections where the examinations were strictly adherd to, as required, very few were able to pass. Does this not indicate that our physical manhood is deteriorating? And does it not imperatively demand that we should take active measures to not only preserve our present manhood, but see to the improvement of our race? The true greatness of any country is found in the physical, mental, and moral character of its subjects, and this greatness can only be maintained by the fostering care, by the nation, of all essential elements of its citizens. Ignorance, licentiousness, and vice tend to degenerate any people. To the school and church are properly relegated the moral and religious training of the people, but the proper care of and development of the physical is largely the sphere of the medical profession, and in this function the State and Nation may and should be actively cooperative.

Our profession has been largely responsible for much of the legislative measures, tending to the safety and protection of the citizens from death-dealing diseases. Much as we have been abused for seeking legislation for the people, because not understood, yet we should pursue our course of doing all we can, as watchmen on the towers of physical dangers, in securing and having enforced, all good laws for protectinng our people. In the past our people have been "bowing down to the god of gold" and seemingly making all else secondary to the attending of money. Heretofore, it was seemingly easy to get legislative measures and large appropriations for preventing and curtailing diseases among sheep, cattle, horses, and hogs,

but almost impossible to get any appropriations for the care of the people. Thousands of dollars are spent by Congress in stamping out diseases among cattle, where hundreds were available for the care of our people. The recent war, with all its terrors and suffering, has awakened the country to the present need of caring for its citizens; and yet there is much to do.

Our stock men wisely spend sums of money to improve the quality of their stock, while the human race seems to have no one to see to its generic improvement. Men and women marry with impunity, though they be physically, morally, or mentally depraved, and no one offers an objection. Is it anything strange that the number of diseased, vicious, or mental perverts seems to be on the increase?

If our country is to gain and hold its standing either physically or financially, it must give more careful thought to the improvement of the people. Should the person afflicted with gonorrhea or syphilis be permitted to marry while so afflicted, and thus transmit the disease to wife and possible posterity? I know in your heart you say "No;" but what have you done to prohibit such a possibility? I remember that when I advocated the quarantine of the one with gonorrhea or syphilis, as you would the small-pox or scarlatina patient, some of you sneered at the idea; and when I proposed that license should not be granted till applicants presented a bill of health, it was thought impracticable and visionary, and yet it looks to me as though the great awakening this nation has had will speedily bring this to pass.

Why should the morally depraved be permitted to marry and perpetuate a vicious race who are a tax and menace to the community? Why should the epileptic be allowed to produce more epileptics? Harsh as may seem the remedy, yet for the safety of our country and the limiting of suffering, should there not be legislative measures taken to meet these cases? Our peace, our safety, and our progress as a nation are being impaired by these uncontrolled conditions, and the medical profession is the natural agent to give the alarm in no uncertain sound. Our people need education along these lines, and we should not hesitate to give the information. Our legislatures should be made familiar with the danger that they may act efficiently, and usually they are ready to respond to the needs, when awakened to the importance.

Should we not have proper and efficient means to prevent all disease that is a danger? Why quarantine against small-pox, diphtheria, or scarlatina, and let the really more dangerous syphilitic or gonorrheal run at large? Just recently I was informed that in a nearby town there were 29 cases being treated for gonorrhea, and possibly there may have been many other cases if all had reported, and all these cases had their origin in one young female who visited that community. Such a case was an unchained menace to that community, whose evil effects may yet reach unborn generations. Should she not have been in quarantine until cured?

It is not that I like to dwell on these things, that I bring them before you, but rather that I may, in a measure, get you to think and act concertedly that we may all acting be able to secure something definite in remedying the present danger, and in time tend to bring about a purer, healthier, stronger, and a more virile race, free from disease, vice and imperfection. Do not the sightless eyes of the thousands of children appeal to

your sympathy and call for prompt action? Do not the agonizing cries of peritonitic women stir your very soul to its depths, when you remember that we might have prevented the infection? Do not the pitable and hopelessly insane from a surely preventable cause shame us to action? Do not the many homes without health or chiming voices of children, demand our best efforts to remedy or prevent? Do not the mentally deficient, the viciously disposed, who are not given an equal chance in life's great struggle, constantly remind us that if we had done our whole duty to the individual and to the State these unfortunates might not have existed?

Again let me appeal to this Society and to the profession at large, that we use all our powers to correct these most deplorable and distressing conditions, for which we may justly be held almost guilty of contributory responsibility by our neglect of duty in not using the means we have or may have to limit or prevent the causes that bring about these inevitable results. Let us at least do our duty for ourselves, for our country, and for humanity.

LONG RESECTION OF THE INTESTINE

By JOHN E. CANNADAY, M. D.
Charleston, W. Va.

Long resections of the intestines are occasionally necessitated by such conditions as extensive gunshot wound, gangerene and ileocaecal tuberculosis, with multiple strictures. The small bowel varies in length from 15 ft. 6 in. to 31 ft. 10 in., the average length being greater in the female. The large intestine varies in length from 3 ft. 3 in. to 6 ft. 6 in. People such as the Russian peasantry who have for generations largely subsisted on a coarse vegetable diet, have longer intestines than those who live on a more concentrated diet. The removal of the large bowel seems to interfere but little with the bodily nutrition, but after the removal of any considerable length of the small bowel, the patient's physiological resources must be very carefully husbanded. Kukula made careful and exhaustive experimental long resections of animals to show by deduction about what proportion of the human intestines could be safely removed.

Both Park and Moynihan have at different times collected all reported cases of long resections of the small bowel and the total number is not large. It has been rather generally agreed that at least half of the length of the small intestine may be removed, and the patient survives and exists in a fair state of health thereafter. Toombs mentions a case of long resection in which the caecum and adjacent small bowel were removed. The patient afterward passed thru a typical attack of typhoid fever, indicating that Peyer's patches are not necessarily a focus of the disease. After cutting down the length of the small bowel the wastage of fats and albuminous materials in the nutrient must be very great, and this part of the diet must be increased for these cases.

CASE I.

Adult male, aged 30 years, weight 128 pounds. Referred by Dr. D. G. Preston, Burnwell, W. Va.

General History.—Abdominal pain over a period of 8 months. Gradual loss of weight and strength; moderate constipation; no attacks of diarrhoea. Pain beginning in the region of the appendix. Occasional vomiting and considerable

regurgitation of food for the past two months. Abdomen slightly rigid. Visible peristalsis, some abdominal tenderness. Wasserman negative. White blood count 6800; pulse 98; temperature 99 degrees. Small area of dullness in the right upper apex.

Diagnosis. — Ileocecal tuberculosis causing partial obstruction of small bowel.

Operation. — Assisted by Dr. B. S. Preston and Dr. Atlee Mairs, the following operation was performed January 4th, 1916: Right rectus incision about 20cm. in length. The caecum was an enlarged mass about the size of a grape fruit. Numerous (8) tubercular strictures of the small bowel were noted. To eliminate these it was necessary to resort to the radical operation as advocated by Caird and resect 33 cm. (10ft.) of the small bowel as well as the caecum and 20 cm. (8 in.) of the ascending colon. A lateral anastomosis was made to the transverse colon. Patient reacted fairly well but vomiting was quite persistant. Thirty-six hours after the operation it was deemed advisable to reopen the abdomen for the relief of obstruction. Some milky fluid was noted in the right flank. Some of the peritoneal sutures of fine silk had failed to hold. All such points were reinforced with additional silk sutures. A slightly adherent kink was noted in the small bowel, near its junction with the colon. This was straightened out and the contents of the rather distended small bowel were milked in to the colon. Two medium sized rubber cigarette drains were inserted in the wound. In exactly 24 hours the patient vomited again, this time a distinctly dark brown vomit. Under novocain suprarenin anesthesia an incision was made in the left rectus, a distended loop of small bowel was drawn out and a medium sized soft rubber catheter was purse-stringed into this, after the method of Dr. J. W. Long, and brought out through the upper angle of the wound. Bowel contents drained from the tube quite freely. The patient did not vomit again. The tube came away the eighth day. The discharge from the fistula caused some skin excoriation, but the sinus closed in two weeks. After this the patient made an uneventful recovery and at the end of the fourth week left the hospital by his own request, with his wounds entirely realed. A few days after the operation his bowels began to move and at first he had an average of six bowel movements every 24 hours. This condition gradually improved and by the time he left the hospital he was having an average number of three movements in 24 hours.

After his recovery and discharge from the hospital this patient was exhibited before the Kanawha Medical Society.

X-ray examination by D. W. R. Hughey shows a rapid filling of the very limited small bowel, with early entry into the transverse colon, part of the contents regurgitating into the remains of the ascending colon and hepatic flexure.

Later History—This patient left the city in severe winter weather and visited friends in the mining regions near by. During this time he celebrated by getting drunk. A few days later he returned to Charleston suffering from a very severe cold. He rapidly became worse and developed the symptoms of an acute tuberculosis of the lungs. He reentered the hospital February 23, 1916, and on February 28, 1916, died.

Post mortem examination made by Drs. M. I. Mendeloff, H. D. Hatfield and the writer. The abdomen was opened by a long, median incision. With the exception of a few adhesions in the loca-

tion of the former drainage tubes, the intestines were in excellent condition. The anastomosis was as smooth as if it had existed for years. There were no visible signs of visceral tuberculosis. A few palpable mesenteric glands that were present at the time of the original operation had disappeared. The small intestine up to the duodenojejunal junction was measured and found to be only five feet seven inches in length. Of the large bowel there were four feet nine inches.

Fantino suggssts that in cases of extensive resection a vicious circle should be established in the remaining segment of bowel in order that the intestinal contents may circulate long enough to complete the digestive and assimilative processes.

Turck says: "A review of the literature and a study of case histories point plainly to the fact that, from a viewpoint of ultimate results, short-circuiting, whenever possible, is much to be preferred to resection, particularly if the lower ilium is involved. In the case reported above, while circuiting was decided against at the time of operation because of the indescribable adhesions, the foul sinuses and fistulous tracts, it is probable that a better ultimate result would have been attained had the worse segments been removed and the remaining adherent gut short-circuited in one or two places. This patient certainly has not enough small intestine to permit of thorough absorption and compensatory intestinal hyperplasia provided adequate digestion."

Henson in his report on Turck's case says that with the usual hospital diet the patient had about six stools a day. He was then given a stringent and digestive ferments, but these had no effect whatever on the number of stools.

Having made a survey of the surgical literature pertaining to this subject, I find that thirty-three cases have been reported of resection of more than ten feet of bowel. Of these there were twenty-seven recoveries and six deaths.

Literature—Kukula, quoted by Kocher; Operative Surgery, third English edition, page 626.

Park, Roswell: Arch. internat. de chir.

Moynihan, Sir Berkeley: Abdominal Operations, pp. 461-468.

Toombs, P. W.: Railway Surg. Journal, November, 1914.

Caird, F. M.: Scottish Surg. and Med. Jour., XIV., 20.

Fantine, quoted by Turck: New York Med. Jour., February, 1914, page 318.

Turck: New York Med. Jour., February, 1914, page 318.

Henson, quoted by Turck: New York Medical Jour., February, 1914, page 31.

INFLAMMATION OF THE PROSTATE.

Read at Annual Meeting of West Virginia Medical Association, May, 1919.

BY H. G. TONKINS, M. D.,
Martinsburg, W. Va.

In presenting this paper to the State Medical Society I shall try to be brief and concise as is consistent with the subject.

The day has come when the practice of medicine is reduced to scientific methods, upon which our diagnoses are made, and of the many common disorders, and one which is most interesting, at the same time of such a nature as to be confusing, in as much as mistakes are com-

mon in connection with this organ, I wish to speak on the Inflammation of the Prostate Gland.

Inflammation of the prostate gland I believe to be more common than is ordinarily recognized among general practitioners and largely due to the fact that we are too careless in our examinations of patients, especially connected with the rectum. I think this can apply to our work in general.

ETIOLOGY.

The large majority of cases of prostatitis are of microbic origin, yet in some instances the condition seems to be of the conjestive type, there being no evidence of infection. In this latter condition the etiological factor may be found in any practice giving rise to irritation of the gland, with a resulting influx of the blood to it. Some of the common cases of this latter type may include horseback riding or bicycling and some of the various sexual practices diverging from the normal mode, coitus interruptus when continued at frequent intervals over a long period of time, inordinate connection, masturbation or prolonged sexual excitement without gratification. Any of these may bring about a catarrhal prostatitis.

This type of prostatitis I believe to be more common than is generally recognized, at least, I have been in closer touch with this class of cases since I have been more or less interested in urology.

Associated with this conjestive type of Prostatitis I have noticed a seminal vesiculitis. Per rectum the gland may not be greatly enlarged, is firm and not hard, and slightly tender. I have noticed also that this type of Prostatitis presents the usual symptoms of Neurasthenia, having all sorts of nervous perversions and complaints, purely reflex, through the superior Hypogastric sympathetic ganglion and imaginary. The patient may complain of radiating pains in the lumbar region, shooting down the hips or along the ureters to the kidneys, even simulating appendicitis. He may complain of burning on urination and on close questioning will have noticed a whitish discharge at the close of same or following defecation.

Treatment—Of course, remove the cause where possible; explaint to the patient the trouble and get his confidence and instill into his mind that he is going to get well. Massage of the gland should be instituted at once. This should be done very gently and intelligently two or three times a week and with good tonic measures and proper hygiene the patient improves and gradually gets well.

The usual cause of Prostatitis is Gonorrhoea. Practically every case of prosterior urethritis invades the glandular structures of the prostate.

SYMPTOMATOLOGY.

The symptoms of acute Prostatitis of gonorrheal origin are those of acute posterior urethritis, plus the symptoms resulting from an infectious process in a dense encapsulated structure. Thus, coupled with urgency, frequency, burning, bleeding and pyuria, there will be a throbbing ache in the region of the prostate. Chills and fever are present. The pain in the region of the prostate is very severe and is increased on standing or walking. Per rectum the prostate is usually enlarged, soft, edematous hot and very painful to the finger. Sometimes the swelling is too great to permit rectal examination.

TREATMENT.

All urethral treatment should be suspended at once and the patient put to bed. Hot perineal packs, rectal douches

with large quantities of hot water, hot sitz baths and suppositories of opium and belladonnae to relieve pain, also internally bland vesicle mixtures of santal oil; Tr. Hyoscyamus and Citrate of Pot., cut down the intake of fluids.

In some cases injection of gonococcal vaccines.

As result of acute gon. prost. acute abscess forms or it terminates in chronic Prostatitis. If abcess developes the patient will have a severe chill and his temperature may rise to as high as 105 degrees; the pain is more severe and a fluctuating mass is felt in the rectum; urination is difficult and retention may occur. Spontaneous evacuation of pus takes place in the urethra usually, but may escape into the rectum, floor of the bladder or possibly into the peritoneum. Gentle massage of the gland should be tried before surgical intervention; often the abcess will rupture on introduction of a catherter. Surgically the gland must be opened through the perineum and not through the rectum.

CHRONIC PROSTATITIS.

In the diagnosis of chronic prostatitis one must base his diagnosis on the history, investigation of the expressed contents and examination of the gland per rectum. It oftimes happens that distant symptoms without connection with his prostate at times bring him under observation and not symptoms clearly anatomically referably to the prostate. Pains in the neck and the shoulders often have an intimate relationship with a chronically inflamed prostate. In fact, any myalgia, renal or testicular pains of obscure origin should be suspected of prostatic trouble.

The microscope offers one of the best aids in diagnosing an infected prostate. The expressed material is collected on a clean slide, the urethra first having been cleaned by urination or irrigation. The prostate is palpated and massaged. The prostate upon palpation is usually painful, somewhat enlarged and sometimes indurated and the trained finger can make out whether or not the gland is of an inflamed nature or whether it is of an adenomatous growth, malignant or containing a calculous. Of course, the age of the patient, urethral discharge, examination of expressed content, history of a previous gonorrhoea and the urinary disturbances are important in the aid of diagnosis. In doubtful cases, where benign or malignant growths are in diseases of systoscope is very useful. Sexual perversions are common in disease of the prostate.

The prostatic secretion may be scanty or abundant. First the urine should be collected in three glasses and the contents noted. The first glass containing the detritus from the anterior urethra, the second and third from the posterior urethra. The examination of the secretion under the microscope will show leucocytes, granular phosphates, epithleal cells, possibly a few red cells, amyloid and lecithin bodies. Of course in chronic Prostatitis the leucocytes and epithelial cells are in abundance.

TREATMENT.

Consists of massage and posterior irrigations with Pot. Per-mang sol., silver application and the usual tonic and hygienic methods. In differentiation of chronic Prostatitis from other disorders of the prostate gland, the age, history, symptoms and rectal examination will be of the greatest help. Time does not permit the further discussion of the other diseases of the prostate of the which I originally intended to write.

PUBLIC HEALTH NURSING

Paper read before West Virginia State Medical Association at Clarksburg, May 21, 1919.

By Mrs. Jean T. Dillon,
Director of State Division, Child Welfare, State Board of Health, Charleston.

"'Visiting Nursing,' or care of the sick in their homes, and one form of public health nursing, has existed in almost all ages. We read of it in enlightened countries in the time before Christ and again in the New Testament . Florence Nightingale, as a 'Health Teacher' has, as yet, no equal in our ranks. Wm. Rathbone of England, with Florence Nightingale's help, founded the first 'Visiting Nurse Association' in Liverpool in 1859.

"The idea gradually spread and took root in America, until now we have public health training centers in connections with several of our Universities throughout the country, and affiliation with our best established Visiting Nurse Associations for training in the practical phases of public health work.

"A 'Public Health Nurse' is a woman doing any form of social work where her professional training is one of the requirements. She may be the 'Visiting Nurse' who comes in response to an immediate need for nursing care, the 'Infant Welfare Nurse' whose work is confined to the care of the very young, the 'Social Service' or 'Industrial Nurse' who is especially interester in the social well-being of an individual or group, or the 'School Nurse' who is employed to work among the school children of a community. The Public Health Nurse is all of these, or any one of them. She is a composite of them, bearing the qualities of all, and may limit her work to any of these activities or combine them all as a general community nurse.

"Public Health Nursing has developed from a serviee of private agencies to a Governmental activity. We are realizing at least that nursing is not merely a private individual service, nor rightly the function of separate small communities, but a part of the great national fight we are making against the menace of disease.

"At the bottom of any type of activity which springs more or less spontaneously into existence, there will be found certain principles which are adopted as fundamentals, and a number of them for this field, date back to 1859 when Wm. Rathbone, with the far-seeing assistance of Florence Nightingale, founded the first District Nursing Association in Liverpool. He appreciated at that time the necessity of employing only well-trained women, and at a time when there were none to be had. Although the development has been sporadic for the last twenty years, each year as opportunity lays a greater burden of responsibility upon the public health nurse, more emphasis is being placed upon this necessity. The much quoted Bishop who thanked God that there were second rate souls to be saved by second rate persons, has his followers in the many kind-hearted people who feel somewhat the same way about sickness. Indeed, a noble Lord, when the Registeration Bill was under discussion in England, arose and assured the House that there were two kinds of nurses required; one for the people who had important operations by eminent surgeons and another kind to nurse the ordinary ailments of the poor. For public health nursing, however—in the usually accepted meaning of the term —whether in city, town or country, there

is but one type capable of rendering adaquate service, and that is the woman who has the knowledge, experience and discipline gained by training in a good hospital, and additional training in this specialized field.

"To supply the working man with poor nursing care because he is poor, andthe rich man with better nursing care because he is rich, is contrary to all ideals and traditions of the nursing profession, and to the fundamental principles of our democracy, for which so much blood has been shed and so much agony endured.

"At present there are eight fundamental principles of public nursing:

"1. That only well-trained nurses should be employed.

"2. That the nurses should not be distributors of material relief.

"3. That there should be no interference with the religious views of the patients.

"4. That the rules of professional etiquette should be rigidly observed.

"5. That co-operation in all its forms should be recognized as of primary importance.

"6. That suitable and accurate records should be kept.

"7. That patients unable to pay for nursing care should receive free service, and that those able to pay for it should do so according to their means.

"8. That the daily working hours of the nurses should be limited, in order that good work may be done and they themselves be kept physically well.

"This number, or classification of fundamentals is by no means final. Each year brings changes and developments undreamed of in the beginning, and requiring adaptability of method and administration if progress is to be made.

"In explanation of the second principle, 'that public health nurses shall not be distributors of material relief'—of course, no nurse is expected to go peacefully on caring for a patient who is suffering for the necessities of life, but it is much better if she provide these through co-operation, except in case of emergency. It has been found that invariably the position of the nurse is weakened if her patients look to her for material relief. A large part of her strength in the home comes from the simple way in which she enters it, as one working woman possessed of nursing skill and knowledge who comes to place these at the disposal of another.

"When we say that a nurse shall not interfere with the religious views of her patient we have not said all, because this is merely negative.

"From her position in the home she can often give positive help in strengthening already existing church connections, regardless of the form of faith, be it Catholic, Protestant or Jewish.

"By professional etiquette we mean the relation of the medical and nursing profession to public health work, and to each other. Public health nursing has had in the medical profession its greatest friend, and not infrequently its greatest stumbling block. The finer and more broad-minded physician has always recognized in the public health nurse a helpmate who strengthens his hands and helps him to prodnce results impossible alone. Men whose minds have been steadily fixed on the welfare of the people, not on circumstances affecting themselves, have from the first gladly given to the nurse a helping hand, and with a fine loyalty sought to strengthen her position with the patients. The poorer and more narrow-minded members of the profession have regarded her with suspicion and feared her interference at

every turn; men occupied chiefly with their own personal careers, who have feared that the public health nurse might jeopardize their authority or the amount of their work, and have persistently denied her the loyalty they have so rigorously demanded for themselves. Which influence has been the stronger is shown by the growth of the work itself, for without co-operation from the medical profession such development would have been an utter impossibility. As a matter of fact, public health nursing has increased, and not decreased, the work of physicians everywhere, and it is encouraging to hear from all parts of the country that former opponents are being won over, becoming first non-combatants and then loyal allies.

"The public health nurse in no way substitutes for the physician. She is there to help him get his treatments carried out, to help him find out the intimate things he needs to know about patients in order to prescribe wisely for them and in order to get people to call in doctors oftener and earlier. The public health nurse would rather have a patient examined thoroughly every year than to have him fall a prey to tuberculosis and go away for his health. She wants babies taken to the doctor every few weeks, instead of when they are at death's door. The well-trained public health nurse is the type of woman who observes professional etiquette, who realizes her position is that of right-hand to the doctor and who has a broad vision for preventive and constructive health work. It is the poorly trained, or the untrained worker, who has been lax in her observance of professional etiquette, who has taken responsibilities beyond her professional sphere and who has aroused criticism and difficulties to be surmounted in our progress. The employment of trained workers for this work will reduce such occurrences to the minimum and will increase, instead of decrease, the work of the medical profession,—and that from the most desirable standpoint—one of constructive help to the people.

"Everywhere the public health nurse stands as one of the most valuable co-operating agents of the community. This has perhaps been a rather unexpected development of her work, but had she failed to respond to this demand and confined her usefulness to the nursing care of her patients, public health nurses would hardly have been counted by thousands, as they are today.

"It is commendable to possess the dynamic spirit of expecting to change everything in the world that needs changing, but the public health nurse must realize that she cannot do it at once, or alone, and that the keynote of co-operation is intelligent tolerance.

"In general, the importance of accurate records has not been emphasized until within recent years. With the growth of co-operation and the increased demand for information, it became evident that the public health nurse had unusual opportunity for collecting valuable data upon which much of our community welfare work and legislation must be built.

"Public health nursing in all its branches requires for its performance, not only a body in good physical condition, but a spirit fresh enough to be capable of enthusiasm—that mountain-moving attribute so essential for accomplishment; and the next principle, viz.: 'limitation of hours of work for the nurse,' must be strictly insisted upon in order that good work may be done, continued day after day, and she herself kept physically well.

"As to the present status of public health nursing, perhaps just a word from other countries would be inspiring and encouraging:

"The British Journal of Nursing, February 8, gives an account of a meeting held recently in London in support of the establishment of a Ministry of Health. Of special interest was the declaration of the President of the Local Government Board, that a great development of maternity and nursing services was needed.

"We are all familiar with the reconstruction work in France, Belgium, Italy, Serbia and other countries, war-ridden and torn, in which many of our Red Cross nurses are being retained as executives and promoters, as well as general workers in the homes of the people. We also know of New Zealand's enviable record in her reduction of her Infant Mortality rate, largely through the work of her public health nurses. In our own country, we have made phenomenal progress, owing to the demands and costs of war. Our Government has created within the U. S. P. S. a Public Health Nursing Service, the Red Cross has changed her Town and Country Nursing Service to a Bureau of Public Health Nursing and upon request of the N. O. P. H. N., has contributed $70,000 of a $150,000 fund to be raised for Scholarships, to be used for public health training of returning overseas nurses, graduate registered nurses turning toward the public health field and for senior pupils in our training schools desiring to enter this work upon graduation. The Federation of Women's Clubs of the United States is co-operating with the N. O. P. H. N. in that each State pledges itself to raise from three to ten Scholarships to be used for the public health training, and in addition a Lay Representative in each State is affiliated with the N. O. P. H. N. to help raise the budget for the work and to secure additional students for the training schools. Some figures from a recent survey in the twelve States included in the Mississippi Valley Conference, may prove illuminating.

"In community nurses per million of population, Ohio leads the conference with 98. Illinois is second with 88. Number of nurses desired by communities ready to establish nursing service, 298. Community nurses in tuberculosis work, 1499, representing 240 communities, total population of 12,840,525. Largest number of nurses is in Illinois, 531; next in Ohio, 490; smallest in South Dakota, 6. Largest number desired by communities ready for them, Indiana, 94; Illinois, 68; North Dakota, 52.

The Minnesota Public Health Association, indiscussing the wholly inadequate medical and nursing service in Minnesota, recently made the following statement:

"We are bending every effort to organize county public health associations, and are already in touch with seventy-five of our eighty-six counties in this matter to instruct people in the need, amongst others, for pre-natal and post-natal medical service. We are conducting a state-wide health tournament dealing with 15,000 teachers and 500,000 children, to educate children to educate their parents in health matters. We have sent out public health demonstration nurses into eighty-four counties, and are continuing to send them out. The director of our public health nursing is now making a tour of the state to insure a future nursing service to include pre-natal and post-natal care. I hope we are all familiar with the 'Robinson Bill,' to encourage instruction in

the hygiene of maternity and infancy, and to extend proper care for maternity and infancy; to provide for co-operation with the States in the promotion of such instruction and care in the rural districts."

Ohio, Alabama and New York have provision in their laws for State Directors of Public Health Nursing, under State Boards of Health; Montana, South Carolina and West Virginia have nurses as Directors of the Department of Child Hygiene under the State Department of Health; many states now have laws permitting counties and cities to use public funds to employ public health nurses while New York and North Dakota compel every county to employ one.

"Reconstruction in this country, judging by the activities of Government Departments in Washington, is to be attacked first from the public health standpoint, and no national public health program, according to health authorities, can be successfully carried out unless the number of public health nurses is immediately and very great increased.

"Surgeon General Rupert Blue, head of the United tSates Public Health Service, which was one of the first departments in the field with a reconstruction program, stated recently that, 'there should be a public health nurse at work in every county.'

"Secretary of War Baker declares that, 'the public health nurse, one of the greatest forces in promoting national health, is needed in greatly increasing numbers.'

"Secretary of Labor Wilson states, 'Labor's reconstruction program must include a carefully formulated plan for repairing the physical waste and destruction of war by the conservation and renewal of national health.' Public health nurses enter into such a program in many ways, in industrial, visiting and infant welfare service. To bring to every worker in our country this skilled care many more public health nurses must be put to work in the community.

"To meet this demand for more public health nurses, the N. O. P. H. N. decided at a recent Convention on two plans, one to fill the immediate need, and the other, future requirements. The program of the N. O. P. H. N. for 1919 is as follows:

GENERAL AIM

(a) Improved Public Health Nursing standards through proper education, effection legislation, supply of qualified teachers and executives.

(b) Extension of service to entire citizenship and adding to present bedside care, nurse's attendance upon delivery of parturient women.

PROGRAM

1. Increase the immediate and permanent supply of Public Health Nurses.

2. Extend opportunities for Public Health Nursing Education, both in postgraduate and undergradute schools.

3. Supplement and extend work of Public Health Nurses by training and employment of trained attendants under supervision of Public Health Nurses.

4. Encourage development of community programs of Public Health Nursing Service as a public utility, its ultimate aim being equitable distribution of service to entire citizenship in municipal and county units.

5. Stimulate state legislation looking toward state direction of Public Health Nursing under immediate guidance of Divisions of Public Health Nursing within State Departments of Health, with qualified Public Health Nurse as chief of the division.

6. Effort to secure perpetuation of

division of Public Health Nursing created for the period of the war within the U. S. P. H. S.

"This program is now being carried out by five different means:

1. Educational work, under an Educational Secretary and Committee.

2. Extension work, under an Extension Secretary.

3. Legislation, under the guidance of a Secretary and a Legal Advisor.

4. Constructive publicity, under the direction of an expert publicity secretary.

5. The Organization maintains an office in N. Y. City as Headquarters; an extension office in Chicago; an editorial office in Cleveland; a ways and means office in Cleveland; includes in its program the immediate placing of an extension office in the South and Far West, with an Extension Secretary in each."

A recent conference was called in Cincinnati of all State Supervisors and Directors, Red Cross Divisional Directors and Metropolitan Life Insurance Field Directors for the purpose of talking over our common problems, and to discuss ways and means for co-ordinating our forces, in order to avoid waste from duplication and over-lapping, and to cooperate more closely.

To assimilate all this and apply it to West Virginia which is practically virgin soil for public health work, is somewhat of a task and in making a practical plan for our work I ask your loyal and unwavering support and co-operation. In our travels about the state on the Health Car, to the smaller and larger communities, we are having an unusual opportunity to study and observe the conditions and health problems of our state at first hand. The task is a tremendous one, but any piece of work can be done by beginning at some part of it and perserving, if all pull together. At present we are concentrating on the necessity of "Health Education" as the most effective means of removing the underlying cause of all of our health problems, and after all if we do not remove the underlying cause, which is lack of knowledge concerning the promotion of health and the prevention of disease, we will continue to go round and round the vicious circle, dealing only with the surface and confining our efforts largely to curative and palliative methods. We are all agreed that the placing of public health nurses in adequate numbers, throughout the state, is one of the most effective measures to be employed. The plan most favored in the country at large, is the placing of "county nurses" but the county plan will not prove adequate or practical in West Virginia, unless we place several in most counties, and the county boards in most counties would stand aghast at the present time if we suggested three nurses all at once, for them to finance. The plan applied in three towns in Cape Cod comes nearer to meeting our need in this state, viz: that of several small towns and rural communities surrounding them, joining forces to secure a Community Nurse who they will unite to finance and support, and she in turn will divide her time and service in meeting their health needs as adequately as possible. This will mean a start in our state and as the value of a community nursing service is demonstrated in various sections, the demand from the people themselves will increase the number, until we shall have an adequate public health nursing service capable of doing our share toward the lowering of our present appalling infant mortality rate, our still-birth rate and our present alarming situation among

the children of pre-school age, and school age, with regard to physical underweight and underdevelopment. This we shall do, primarily through the education of mothers, and prospective mothers, in the fundamental principles of the promotion of health and the prevention of disease, through public health nurses who will act, everywhere, as "Health Teachers" whether they are doing Public Health Nursing as a School Nurse, a Tuberculosis Nurse, an Infant Welfare Nurse, or a Community Nurse, giving a generalized service.

Announcements and Communications

October 17, 1919.

Dr. Jas. R. Bloss,
Editor W. Va. Medical Journal,
Huntington, W. Va.

Dear Doctor:

Enclosed are the questions used at our examination held in this city October 14-16. Use your judgment as to the publishing of these questions. Fourteen were present at the examination, four of them colored, and one of the latter a woman.

It may be of interest to you to note in the Journal that the Public Health Council has resolved hereafter to hold four examinations each year, namely, on the second Tuesday of January, April, July, and October. All of these will be held in this city.

Respectfully yours,
S. L. JEPSON,
State Health Commissioner.

Chemistry and Medical Jurisprudence

1. Differentiate between phosphatic reaction, and glucose reaction in Fehling's test, when applied to urine.

2. State uses of urinometer, and what aid can be attributed to it in diagnosis.

3. What antidoes are employed in Phosphorus poisoning? Explain action of those used.

4. Differentiate between essential and fixed oils, with example.

5. Define distillation, filtration, saturation, evaporation and sublimation.

6. Designate by equation what happens when zinc is treated with muriatic acid.

7. What is a (a) normal salt, (b) acid salt, (c) double salt? Example of each.

8. What is a fatty acid? Give names and formulae of three most important ones. (b) What is the fat splitting enzyme, and where found in the digestive tract?

9. State how a chemical antidote differs in its action from a physiological one. Explain by example.

10. What is Dakin's Solution? How is it prepared? Give reaction.

11. How does the law consider impotency in relation to the marriage contract? What conditions must be fulfilled in order to nullify the contract?

12. What is necessary to constitute rape? Explain in detail.

—H. E. Gaynor.

Anatomy and Embryology

1. Give general characters of a vertebra.

2. How are articulations divided, and give an example of each.

3. How many varieties of muscular fibers? Give an example of each.

4. Give a general description of the peritoneum. What are the important organs to which it is attached?

5. Name the ductless glands. Why so called?

6. Name the cardiac veins, and describe the Venae Thebesii.

7. Give location, and describe the structure of the kidney.

8. Give the development of the teeth.

9. Name the cranial nerves, and give the function of the first second, fifth and tenth.

10. Give brief anatomy of prostate gland.

11. Name the ligaments of the shoulder-joint.

12. Name the divisions of the alimentary canal. And the accessory organs.

—J. L. Pyle.

Physiology and Histology

1. Classify and describe the white blood cells.

2. Describe the air cells of the lung and the changes between the alveolar air and the blood.

3. What is the function of the pancreas?

4. Describe the histological structure of the mammary gland.

5. How is the heart muscle supplied with blood?

6. What is meant by the vasomotor nervous system—its importance?

7. Describe the composition and circulation of the lymph.

8. What becomes of the end products of metabolism?

9. Describe systalic and diastolic blood pressure, pulse pressure and their variation with age.

10. Compare the contents of the first part of the small intestine and the large intestine.

11. What changes in functional activity occur in sleep?

12. Describe the process of deglutition.

—H. E. Sloan.

Materia Medica and Therapeutics

1. Name three therapeutics agents that augment the hepatic function.

2. Enumerate some of the indications and contra-indications for the use of Ergot.

3. Give the official term, part used, and the active principles, fox-glove, deadly night-shade, henbane, monkshood, and dog-button.

4. State the physiological action and therapeutic uses of the official digestive ferments.

5. Why is trianol and sulfonal prescribed in combination?

6. What reason would you assign for the hypodermical administration of atropin and morphin sulfate prior to general anesthesiae?

7. Write a prescription for Acute Bronchitis, (in a male, 20 years of age) employing three ingredients with an excipient.

8. Name the principal preparations of iron, the dosage and incompatibilities of the principal ones.

9. What is chrysarobin, where found, and how applied?

10. Name six motor excitants, and six motor depressants.

11. Prescribe for a case of Acute Catarrhal Enteritis in an adult.

12. What respiratory stimulants exert a specific action on the medullary center? (respiratory centre).

—H. E. Gaynor.

Bacteriology and Hygiene

1. Discuss ptomaines and toxins.

2. Name the external defenses of the body and describe action of each.

3. What are the conditions essential to the growth and development of bacteria?

4. Describe spore formation.

5. Describe the streptococcus and its pathogenicity for man.

6. Name the pathogenic spirilla.

7. Discuss immunity.

8. Give the modes of transference of communicable diseases.

9. What is the period of incubation of (a) diphtheria, (b) scarlet fever, (c) smallpox?

10. Describe the construction of two types of sanitary privy.

11. Discuss the relationship of insects to disease.

12. What precautionary measures would you take to protect the water supply of a rural home where such supply was (a) spring, (b) artesian well?

Practice of Medicine and Pediatrics

1. Give symptoms of incipient tuberculosis.

2. What is phlebitis and treatment?

3. Differentiate between hemorrhage and perforation in typhoid, and give treatment of hemorrhage.

4. Give diagnosis and treatment of measles.

5. Classify pleurisy and give treatment of each class.

6. Give diagnosis and treatment of mitral stenosis.

7. Give symptoms, diagnosis, and treatment of diphtheria.

8. Give diagnosis and treatment of cerebro spinal meningitis.

9. Clasify diarrhoea and give treatment.

10. Give diagnosis and treatment of lobar and bronchial pneumonia in a child six years of age.

11. Give diagnosis, causes and treatment of urticaria.

12. Give method of preparing milk for a baby two months old.

—E. H. Thompson.

Obstetrics and Gynecology

1. Give a brief description of the impregnation of the ovum.

2. What are the conditions of the uterus and adnexa which may be mistaken for pregnancy?

3. Give the varieties of asphyxia of the new born baby, and method of treatment.

4. Phlegmasia Alba Dolens. Give etiology, clinical course, prognosis and treatment.

5. Give the contraindications, and the indications for the use of forceps.

6. Post-Partum Hemorrhage, predisposing causes, exciting causes and treatment?

7. Give the management of the second stage of labor.

8. Define prolapse of the uterus. Causes, symptoms and treatment?

9. Describe phantom tumor, how would you make a diagnosis? Give treatment.

10. Define cystocele and rectocele, and give treatment of each?

11. Name the more common varieties of genital fistulae.

12. Define plastic operations as applied to gynecology.

—J. L. Pyle.

Surgery

1. What is hysterectomy, and describe various methods of performing same.

2. Classify fractures and give your technique in treating a fracture of the surgical neck of femur in an elderly lady.

3. Give your technique in a large infected wound of the thigh.

4. What is Buck's extension, its use, and how applied?

5. Give your method of procedure in a case of early and late carcinoma of the pyloric end of the stomach.

6. Give your method of treatment of a gun shot wound of the chest.

7. Give symptoms and treatment of pyorrhea alveolaris.

8. What is exophthalmic goitre? When would you operate and give your technique.

9. What is lipoma, and treatment?

10. Classify anesthesia. Mention your favorite and why, and mode of administration.

11. Differentiate between varicocele and hydrocele, and give your technique in a circumcision.

12. Classify burns, and give your methods of treatment.

—E. H. Thompson.

Special Medicine

1. Name the extrinsic muscles of the eye and give the nerve supply to each.

2. Describe the mechanism of accomodation of the eye.

3. What is diplopia and what are the causes?

4. Diagnosis of trachoma and treatment.

5. Give diagnosis and treatment of suppurative otitis media in the initial stage.

6. Give diagnosis and treatment of acute mastoiditis in early stage.

7. Treatment acute corysa.

8. Diagnosis of chronic ethmoidal sinusitis.

9. Diagnosis and treatment of membranous croup.

10. Differentiate acute follicular tonsilitis and diphtheria.

11. Differentiate iritis and glaucoma and treatment of each.

12. Treatment for chronic follicular tonsilitis.

—V. T. Churchman.

Sept. 26th, 1919.

Editor W. Va. Medical Journal,
Huntington, W. Va.

My Dear Editor:

During my student days in Boston twenty years ago, I picked up at one of the second-hand book stores an old Medical Work, dating back to the year 1805. I bought the book, more for curiosity, and I think the price that I paid for it was ten cents. What attracted my attention were some terse epigrams on the fly leaf and scattered about the book on the leave margins. The original owner of this book must have been a philosopher of no mean nature. I copied some of these epigrams in an old account book that I had and I happened to run across this a few days ago. The original book is either mislaid or lost, probably thrown out years ago. I am enclosing you some of these epigrams and if you care to publish them, do so, as I think they are as applicable now as they were when they were written:

"Patience is God's greatest gift. Cultivate this virtue, caress and nurture it and success will crown your efforts."

Another good one that will more than apply to this day and generation follows:

"In building up a practice remember that neatness of person, as well as cleanly surroundings help one a great deal. Avoid solvenly habits, be punctual in your appointments, and always meet your financial obligations. Keep your head cool, your bowels open, your nerve with you always, and put your trust in the Lord. Be dignified, courteous, and gentle upon all occasions. Devote at least two hours a day to reading medical subjects. Keep in touch with the literature of the day. A good play occasionally will act as an aphrodisiac. Be ethical in all your bearings toward your brother practitioners. Be charitable to the poor and afflicted. Let your light so shine that when it goes out it will be missed, and remember that no matter how important you might consider yourself, that someoone else will fill your place in the community just as well and will probably make more money. Live your life each day so that in the evening thereof you may tell one and all to go to hell."

These writings were scattered through the pages of this old musty volume written in a cramped hand and in some places the ink had faded and it was almost impossible to describe. I think anything of this nature is interesting to the live medical men of today. It shows that human nature was the same in the past as it is today. They had the same problems to solve and the same difficulties to overcome. The old writer in the margin was at least human.

Yours truly,

E. R. McINTOSH, M. D.,
Elkins, W. Va.

SOUTHERN MEDICAL ASSOCIATION, THIRTEENTH ANNUAL MEETING.

Asheville, North Carolina, "Land of the Sky," November 10-13, 1919.

Dr. James R. Bloss, Editor,
Huntington, W. Va.

Dear Dr. Bloss:

The above is a simple announcement of our approaching meeting. Here is a brief outline of the program:

Monday, November 10: Section on Urology, Section on Pediatrics, National Malaria Committee (Conference on Malaria), Southern States Association of Railway Surgeons, Conference on Medical Education, Southern Gastro-Enterological Association, and at night a public meeting under the direction of the Section on Public Health.

Tuesday forenoon: The formal opening with the addresses of welcome, address of the President, Dr. Lewellys F. Barker, the Orations on Medicine, Surgery and Public Health, etc.

Tuesday afternoon, Wednesday and Thursday: Section on Medicine, Section on Public Health, Section on Surgery and Section on Eye, Ear, Nose and Throat. Also on these days the American Child Hygiene Association (formerly the American Association for the Study and Prevention of Infant Mortality).

Tuesday night: A big general meeting early in the evening, followed by a reception to the President at the famous Battery Park Hotel. Wednesday night: another general meeting.

A great program, delightful entertainment, beautiful scenery, balmy climate, fine hotels and plenty, reduced rates on

all railroads—everything just ideal for this meeting.

Any mention that you may make in your good journal regarding our approaching meeting will be appreciated. A bulletin with further information will be sent you soon.

Very truly yours,
C. R. LORANZ,
Business Manager, Southern Medical Association.

Birmingham, Ala., Oct. 11, 1919.

Dr. J. R. Bloss,
Huntington, W. Va.

Dear Dr. Bloss:

After two years' of service in the Army I am glad to return to private practice and at the same time continue, as I did for years, to devote one or two hours a day to the interests of the Southern Medical Association and its Journal.

The work of both the Association and Journal has been carried on wonderfully well during the war. I recognize that I have not been missed; but just the same am happy to be "back on the job," and to extend greetings to the members of the Southern Medical Association.

Attached is a memorandum which I hope you will read and accept as a part of my letter to you.

Indications are that we shall have a great meeting in Asheville this November, and I hope to have the pleasure of seeing you, and to be if some service to you there.

With best wishes, I am
Very truly yours,
SEALE HARRIS.

Memorandum on Southern Medical Association Activities

The Southern Medical Association has passed through the experimental stage and there can be no doubt but that its future will be even more useful than has been its past; but the success of any organization depends upon the continued interest and activity of its members.

The Southern Medical Association and its Journal have been built up by the progressive physicians of the South, and though there was no meeting of the Association during the war, there was never any lack of interest on the part of its members.

At the next meeting of your local medical society, will you not be good enough, under the head of miscellaneous business, to announce that the next meeting of the Southern Medical Association will be held at Asheville on November 10-13, and in a few words tell your medical conferers what you know about the Association and its Journal?

The American Public Health Association is conducting a campaign for new members on the plan of asking its members to induce others to join. Its membership has nearly doubled in a few months. We can double the membership of the Southern Medical Association before the Asheville meeting by united efforts. Is it asking too much for you to help increase the membership, and therefore the usefulness of the Southern Medical Association?

I am enclosing an application blank. Will you not give it to your doctor friend next door, or to the one just around the corner, or will you not write to one or two doctors suggesting that they take part in the upbuilding and maintenance of a great medical organization in the South?

SEALE HARRIS,
Secretary-Editor.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., November, 1919.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription . . . . . $1.50 per year
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—Robert J. Reed, Wheeling, W. Va.

FIRST VICE-PRESIDENT—J. Frank Fox, Bluefield, W. Va.

SECOND VICE-PRESIDENT—S. M. Mason (deceased), Clarksburg, W. Va.

THIRD VICE-PRESIDENT—C. M. Hawes, Huntington, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A. FOR 1918-1919—F. LeMoyne Hupp, Wheeling, W. Va.; Alternate—Henri P. Linz, Wheeling, W. Va.

DELEGATES TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg, W. Va.; Alternate—W. W. Golden, Elkins, W. Va.

COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; H. P. Linz, Wheeling, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; L. H. Forman, Buckhannon, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; J. E. Rader, Huntington, W. Va., two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, W. Va., one-year term; E. H. Thompson, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—H. L. Goodman, Charleston, W. Va., one-year term; Charles O'Grady, Charleston, W. Va., two-year term.

INCREASE IN RATES FOR ADVERTISERS

The rates established for advertising space in this Journal have remained the same since 1916. During this period the cost of publication has almost doubled. This increase has been met by the Publication Committee and the Council of the State Association without any advance to the advertisers.

This question has been under consideration for a number of months. A great deal of correspondence with the heads of Journals owned by other State Medical Associations brings to light that they, too, are having difficulties of the same kind.

In order to maintain the standard of this Journal and meet the expense it will be necessary to advance the rates on all new business January 1, 1920.

This provision is made that all old advertisers who shall renew their contracts before January 1, for one year, are to be permitted to do so at the rate now in force.

PROBLEMS

Just now our profession is facing a period of re-adjustment which is pregnant with possibilities. Such a large proportion of the active practitioners entered the government service that those who did not had a very onerous task for a time.

A great many of the men who were in the service are seeking new locations. These men bring with them the "group idea" in regard to re-entering civil practice. This has much to commend it. Again we find that, as a result of army service, there is the intention of specializing. In fact, some advocate elimination of the general practitioner entirely. With this last we do not feel in sympathy. This may be in part due to the fact that for all of our professional life we have done general practice, surrounded by men similarly engaged. Yet it does seem that there are other reasons which are good ones why it will be a mistake to do away with the family physician.

Then we find that we still have the problem of chiropractors, mechano-therapeutists, professors of Battle Creek methods, et cetera. In spite of a very excellent medical law with teeth to it and an earnest effort on the part of our State Department of Health, through Dr. Jepson, the Health Commissioner, to eradicate these illegal cults they flourish in our midst.

May it not be true that we, ourselves, are to a great extent responsible for their existence to begin with? Suppose we sit down and run over yesterday's and today's work and with perfect frankness see if we have not sown some seeds which will grow into well developed financial weeds for some quack. Did X come in with a headache? Did we examine his urine; take his blood-pressure; inquire into the condition of his eyes and so on? Or did we give him some acetanild comp. or aspirin or phenacetine with possibly a little codeine? and so on through the list. Did we really make every effort in our power to get to the true cause of his ailment? In short, have we been honest with our patient and fair to ourselves? Are we not responsible for sick persons getting disheartened, or should I say disgusted, with physicians?

There is one thing that the service men have brought back with them and that is "find out what is wrong and what is causing it." This is going to be of incalculable benefit to our profession for it is going to convince the rank and file that rest and study are necessary.

This rest and study must be taken away from the sound of our telephone bells. To get out of town and attend clinics will do more than one imagines to freshen one up and revive interest. If we are to hold the esteem of the laity for our profession we must be sure that we are worthy of it.

Another of our problems is Health Insurance and various plans of compensations for workmen. How many of our members have given thought to this matter? It is a very important question and one to which we should give earnest consideration.

These are but a few of the questions with which we are confronted, but they bring us to this conclusion. All of the physicians of West Virginia are vitally concerned. We must get to work and thoroughly rejuvenate our County Societies. We must attend the meetings and face a free and frank discussion of these matters of vital importance fearlessly. It is necessary that we get our

organization into a strong, closely knit one that we may be in position to secure those things which are our due.

THIRD SURVEY OF HOSPITALS

The third survey of hospitals being made under the auspices of the American Medical Association is now well under way. Through an extensive correspondence and a third questionnaire the Association has collected a mass of information on the subject. Much of this material has been tabulated and forwarded to committees in each state representing the state medical associations. Most of the state committees have arranged definite lines of action and by inspection of the hospitals or by other methods are securing first-hand information by which the data collected by the Association is being carefully checked. The immediate end sought is to provide a reliable list of hospitals which are in position to furnish a satisfactory intern training. The investigation is not limited to intern hospitals, however, but will cover all institutions and the data obtained will be useful in any future action which may be taken in classifying hospitals. The work in West Virginia is in charge of a committee, of which Dr. C. M. Scott, of Bluefield, is chairman; Dr. Frank LeMoyne Hupp, Wheeling, and Dr. A. P. Butt, Elkins. The closer relationship which the hospital now bears to the public in the community which it serves makes it all the more important that the service rendered by it shall be excellent in character.

"WHAT WE KNOW ABOUT CANCER"

*A Hand-book for the Medical Profession. Prepared by a committee of the American Society for the Control of Cancer, American Medical Associated Press, Chicago, 1918.

The American Society for the Control of Cancer has been in existence and working effectively for a number of years. The sole object of the society, at present at least, is the "dissemination of facts in regard to cancer to the end that its mortality may be reduced by a wider knowledge of the disease."

The effort represented by the present pamphlet has perhaps the most far reaching possibilities for good of any single attempt to lessen cancer mortality undertaken in this country.

It is no longer necessary to argue the point that delay is the one great factor in cancer mortality. At least four-fifths of cancer deaths could be prevented by early recognition. The conditions necessary for recognition of cancer in ample time for cure are not ideal but distinctly practicable. Public education is one important pathway of improvement, but education of the medical profession itself is of equal if not greater importance. Statistical studies have shown than in the majority of cases the doctor has had the cancer patient, "under observation" over a year before efficient curative treatment is instituted. It is needless to state that during this year the majority of cases have changed from curable to incurable. As the pamphlet itself somewhat mildly puts it. "The conditions call for a far keener appreciation of responsibility for the morality from cancer than now generally exists in the medical profession."

It is not possible here to abstract this pamphlet which is already so condensed. The general facts concerning cancer are outlined and then each important type and site of cancer is taken up in detail

and the forms, symptoms, standard treatment, and results to be expected are outlined for each type.

The chief point we would make here is that if every medical man would study and seriously apply the teaching in this pamphlet, which he can read an hour, the question of delay in cancer would be solved in so far as it is referable to the medical profession. The ultimate possible good obtainable from the wide spread dissemination of this pamphlet is so great that we would urge every possible means to get it into the hands of as many medical men of all classes as possible. It can be had from the American Medical Association, 535 N. Dearborn St., Chicago, for 10 cents.* If you are a trained surgeon get it. It will interest you. If you are further afield get it and study and apply it. If you feel misgivings that some of your cases in the past might have been saved had you been more sure and acted more promptly (and who of us does not have such misgivings) get it. It will help you in future cases.

We would especially beg the assistance of Boards of Health, both state and municipal and of medical societies in distributing the pamphlet. It can be bought cheaper in quantities and sent out with your other mail matter with almost no extra cost or trouble. When such a simple means for such far reaching good is in our hands it is a pity to let it lie neglected.

Society Proceedings

Dartmoor, W. Va., Oct. 10, 1919.

Editor The W. Va. Journal:

The Barbour - Randolph - Tucker County Medical Society met in the Metropolitan Hotel, at Thomas, on Oct. 8.

The following physicians were present: Drs. Butt, Miller, Lanich, Moore, E. T. Davis, N. R. Bosworth, A. S. Padilla, Carwell, Vernon, McElrath, Perry, Bolton, Irons, and Groomes.

Dr. Miller presided, in the absence of the President.

The reading of the Minutes were dispensed with.

A communication from Dr. C. E. Bingman, Director Bureau, of First-Aid Department, Military Relief of Potomac Division of Red Cross, was read. The Society expressed its thanks for the proffered aid in case there should be a return of the pandemic influenza this year.

The following physicians were elected members of the Society, dues to begin January 1, 1920, excepting Dr. Stroud, who had paid for 1919: Dr. C. G. Stroud, Berryburg; Dr. Glen Harper, Beverly; Dr. Percy J. McElrath, Prince; Dr. Charles Taylor Vernon, Kempton; Dr. Harry H. Bolton, Parsons, and Dr. U. M. Carwell, Hendricks.

Drs. Irons, Butt and Perry were appointed a Committee on Necrology; the following members having died within the last year: Dr. H. W. Daniels, killed in France, July 19, 1918; Dr. H. W. Neil, died in Staunton, Va., of apoplexy, October 7, 1918; Dr. C. G. Rodgers, died in City Hospital, of Pneumonia following Flu, Elkins, October 26, 1918; Dr. C. W. Birdsoll, died in Davis Memorial Hospital, of Pneumonia, on February 11, 1919.

Dr. A. S. Bosworth, of Jenningston, was substituted for Dr. S. D. Few, on Legislative Committee, and Committee continued. The Committee on Red Cross Medical Work, not having had any duties to perform since its existence, was discontinued.

The election of officers of the Society

for the year 1920 resulted as follows: President, Dr. Lloyd J. Lanich, Coketon, W. Va.; First Vice President, Dr. H. K. Owens, Elkins, W. Va.; Second Vice President, Dr. F. B. Murphy, Philippi, W. Va.; Censor for Randolph County, Dr. O. L. Perry, Elkins, W. Va.; Secretary-Treasurer, Dr. J. C. Irons, Dartmoor, W. Va.

Dr. C. A. Grooms read a well prepared paper on "Eclampsia, emphasizing especially, its etiology and treatment. I am sending the paper to the Journal.

Dr. L. J. Lanich read an excellent paper on "Treatment for Some of the Emergencies in Obstetrics," "Asphyxcated Infant, Post-Partum Hemorrhage, Placenta Preora, and Eclampsia."

Our time was too limited for any lengthy discussion of the papers. This paper I am also sending to the Journal.

Dr. N. R. Davis, having recently returned from the Army Medical Service abroad, gave a very interesting account of his observations and experiences. He was assigned with the British, and spent some time in Scotland, England and Italy. He was not favorably impressed with the English surgeons at first, but on becoming better accustomed to their customs and habits, he learned more to appreciate them. He spoke most highly of the kindness of the Scottish surgeons. He spent some time in Italy. Was there on the last drive on the Piave, and said in crossing the river under fire, he thought none would be left—not even himself. After the armistice they had a very good time, but before, he thinks General Sherman was not far wrong in his description of war.

Dr. A. P. Butt gave a short talk on "Nephroliathis of Long Duration, Destruction of the Kidney," reporting a case which had been diagnosed by Dr. Groomes, and operated upon by Dr. Butt. He exhibited the stone which was immense, and one can hardly conceive how a patient can endure such a stone in that region.

Dr. J. C. Irons read a paper on "The Physician's Responsibilities," suggested by the evident decadent condition of citizens as developed by army physical examinations, and the most evident causes, and the preventable nature of the disabilities.

The next meeting is to be in Elkins. January, 1920. The physicians were given a bountiful lunch at Hotel Metropolitan, and had to hurry through to reach the train. The meeting was very interesting and full of work, owing to the limited time there.

J. C. IRONS,
Secretary.

LEWIS COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Lewis County Medical Society was held in the State Hospital Clinic Room, Tuesday, October 14, 1919, with M. R. Casey, M. D., presiding.

The special feature of the meeting was a paper read by G. M. Burton, M. D., on the subject of "Headache." The topic was especially well handled, as Dr. Burton discussed headache as a symptom of some functional or organic disease—condemning the custom of treating headache lightly and by the so-called "headache" cures. The various causes of headache were systematically outlined and considered with particular reference to diseases of the organs of the body. Dr. Burton convincely advocated a complete physical examination by a competent physician in every case of persistent headache before any treatment whatsoever is instituted.

Dr. M. D. Cure, the County Health Officer, gave a very interesting and instructive talk on the importance of promptness in reporting all infectious and contagious diseases.

The hospital proposition for the City of Weston was brought up. The Medical Society is unanimously in favor of a local hospital and willing to aid in every possible way.

Those present were Drs. M. R. Casey, C. E. White, F. G. Petitt, G. M. Burton, S. M. Burton, Geo. Snyder, W. P. King, M. D. Cure and G. R. Post.

G. R. POST, M. D.,
Reporter for the Lewis County
Medical Society.

State News

The Second Division of the West Virginia State Nurses' Association held a meeting in Huntington in October.

Addresses were made by Dr. J. A. Guthrie, of the Guthrie hospital, and Miss Edna Brown, of the Kessler-Hatfield hospital, after the session had been opened by Rev. J. L. Vinson, of the Guyandotte M. E. Church, South. Miss Anna Bessler, of Charleston, the president of the district association, presided.

After the reading of the two addresses the meeting recessed until 2 o'clock, when the address of the state president, Mrs. Susan Cook, of Charleston, was read. She spoke of the reorganization of the American Nurses' Association.

Mrs. Harriet C. Lounsberry, of the public school nursing department at Charleston, was next on the program, taking as her subject the plans of the child welfare department and public health division of the city of Charleston.

Dr. A. K. Kessler, of the Kessler-Hatfield hospital, spoke next, setting forth reasons for the disinclination of young ladies to enter the nursing profession.

Dr. L. V. Guthrie, of the Huntington State hospital, spoke next, urging that all nurses advocate the employment of visiting nurses in the schools. Dr. Guthrie stated that he would make an effort to have a course in home nursing included in the curriculum of the state normal schools.

The election of officers followed, when the following were named: President, Miss Elizabeth Oliver, Huntington; First Vice President, Miss Anna Trimble, Huntington; Second Vice President, Miss Anna O'Halloran, Huntington; Secretary and Treasurer, Miss Mary E. Reed, Charleston. Directors for three years: Miss Edna Brown, Huntington; Miss Dorcas McGraw, Charleston; Miss Edna Lynch, Bluefield. Directors for two years: Miss Mary J. Parry, Hansford; Miss Lillian Schreiner, Charleston; Mrs. Nell Noel, Princeton. Directors for one year: Miss Ada Bell, Huntington; Miss Elizabeth McGregor, Charleston, and Mrs. Earl C. Bobbitt, Hinton.

Miss Nellie Learned, superintendent of the Chesapeake and Ohio hospital, Huntington, and one of the best known hospital executives in the association, spoke on the army schools of nursing. Miss Learned was in army service for months during the war and her experience enabled her to deliver a highly instructive address.

Dr. Karl C. Prichard, of Huntington, who recently returned from overseas duty, has been appointed acting assistant surgeon of the U. S. P. H. department, for the examination and treatment of disabled soldiers, while the government has signed contracts with the

Huntington General Hospital and the Barnett Hospital to care for ex-service men.

The West Virginia Hospital Association will hold a meeting December 10th and 11th at Parkersburg. The first session will open at 1 p. m., the 10th, closing at noon the 11th.

Dr. W. C. Covey, formerly located at Beckley, is now at Sullivan.

Major Chas. A. Barlow, of Benwood, who is still in the services of the government, is now at B. H. Ft. Sam Houston, Texas, where he is at the head of the Neuropsychiatrie service in that hospital. He expects to return to West Virginia as soon as he is released from the army.

Dr. Oliver H. Griffith, of Wheeling, who has been in the army service, has resumed his practice in that city.

Dr. Christian R. Holmes, of Cincinnati, has announced his retirement from private practice.

Dr. C. L. Holland, of Fairmont, spent some time at the John Hopkins Hospital in Baltimore in the children's department, as is his annual custom.

Dr. I. C. Hicks, of Huntington, attended the Clinical Congress of Surgeons held in New York, October 20th.

Dr. Lawrence Carr, aged 77, of Charleston, died in that city in September. Dr. Carr was a graduate of the University of Louisville in 1872.

Dr. T. W. Moore, of Huntington, will attend the meeting of the Southern Medical Association, which will hold its thirteenth annual session at Asheville, N. C. Dr. Moore will present a paper before this body.

Drs. J. C. and C. P. S. Ford, who have been in army service, have opened offices in Huntington.

Dr. J. E. Cannaday, Dr. Hugh G. Nicholson and Dr. R. H. Dunn, of Charleston, were in attendance at the Clinical Congress of Surgeons in New York.

Dr. Henry A. Christian, Hersey Professor of the Theory and Practice of Physic at Harvard University, has assumed in Washington, for the academic year 1919-20, the position of Chairman of the Division of Medical Sciences of the National Research Council. Dr. Christian has been Physician-in-Chief of the Peter Bent Brigham Hospital, Boston, since 1911, and was Dean of the Faculty of Medicine of the Medical School of Harvard University from 1908 to 1912. He is a well known and active member of various national associations of medical men and of the American Academy of Arts and Sciences.

Dr. W. C. Ellis, of Racine, W. Va., died October 8th, in Charleston, as a result of an automobile accident, in which both he and Mrs. Ellis were severely injured. Mrs. Ellis died a few hours after the accident, Dr. Ellis living several days.

Dr. Stanley W. Barber, of Caperton, W. Va., has recently returned from France and will take up private practice within a short time.

Dr. J. L. Bosworth, formerly located at Huttonsville, is now at Mill Creek.

Medicine

ECZEMA IN INFANTS

Ravitch and Steinberg (Journal of Cutaneous Diseases) state that investigating the causes of infantile eczema they have been struck by the number of cases which occur in breast-fed children, persisting long after the child has been weaned entirely or changed to a modified milk. No clue could be found in the history of the child itself but on questioning the mother they have noted the large number of cases in which thyroid enlargement occurred in the mother during pregnancy.

Some few years ago when investigating these infantile eczemas from the feeding standpoint, attempting to divide them into classes according to their inability to assimilate carbohydrates, fats or proteids, we were very apt to assign the deficient fat-metabolism class which are now considered to be due to abnormalitie: of the thyroid secretion.

The type of infantile eczema which is very likely due to disturbed thyroids secretion does not differ much from other infantile eczemas. However, it is peculiar that this form of eczema is always a dry one. There may be sweating, but no fatty or oily secretion seems to be present.

It would seem worth while to try iodin or thyroid gland administration in those cases of infantile eczema where there is an enlargement of the thyroid gland in the child or a history of such enlargement during pregnancy or nursing in the mother. The danger of causing goitre by such medication is almost if not entirely nil.

POISONING BY BISMUTH SUBNITRATE

Raul F. Vaccarezza (La Semana Medica, April 10, 1919) divides the toxic accidents into two classes. The first class comprises buccal lesions as well as renal and gastrointestinal, dependent on the direct action of the metal which is absorbed in the form of a soluble albuminate. In the second class are grave and rapid phenomena of cyanosis, collapse, and methemoglobinuria due to absorption of nitrites elaborated in the intestine through the action of the intestinal flora on the subnitrate. Its external use should be accompanied with caution, never using more than three c. c. of Beck's ten per cent paste. It is better avoided in thoracic, abdominal and joint fistulae, also in infancy. In gastrointestinal therapy it should not be prescribed for the adult in quantities greater than twenty grams a day, remembering that in children the intestinal flora seem to favor the transformation of the subnitrate into the nitrite. It should never be used in gastrointestinal radiography, the subcarbonate of bismuth or the sulphate of barium being substituted and the opaque substance being rapidly gotten rid of by enemata, purgatives, or gastric lavage.

MAGNESIUM SULPHATE IN BURNS

Meltzer found that a concentrated solution of magnesium sulphate was of considerable value as an application in scalds and burns (Jour. Phar. and Exp. Ther.). It was found that burns of the second degree are invariably arrested in their development when a molecular solution of Epsom salt is applied early. As a rule burns of the third degree run a more favorable course under magnesium sulphate solution than under any

other treatment. Solutions more concentrated than twenty-five per cent had an even better effect. The good results were not so noticeable in the advanced stages of burns on account of the infection usually present, but even then it had a favorable influence.

OHIO DRUGGISTS AND THE SELF TREATMENT OF VENERAL DISEASES.

Five hundred and sixty-two Ohio druggists have pledged themselves not to prescribe or recommend any remedy for a venereal disease; not to handle patient medicine for self-treatment of venereal diseases; to furnish to each customer applying for such medicine a circular published by the United States Public Health Service; to direct such applicants to a reputable physician or venereal disease clinic; and to refill prescriptions for the treatment of venereal diseases only when presented by the original holder and when the physician giving the prescription is still in charge of the case. The United States Public Health Service is endeavoring to interest all druggists in this movement and will provide druggists who have signed pledges with literature for distribution.

SOFTENING OF THE BRAIN AND CEREBRAL HEMORRHAGE

Salomonson has noticed that since food has been scanty and dear, he has not encountered so many male cases of cerebral hemorrhage as in previous years, but on the other hand, the number of cases of softening of the brain has increased four-fold. The total figures for nearly seven years in his service are forty-six of the latter to thirty-eight of cerebral hemorrhage, but for the first four years the totals were only fourteen to twenty-one. Bread cards were introduced in 1915 and potato cards in May, 1916, and they were soon followed by great restrictions in fat and meat. During the last half of 1918 the ration of food was apparently at the lowest possible figure. There was first a general loss of weight and then a decline in the blood pressure. The pulse rate also declined, dropping to 40 or 50 or even less in the morning. The blood pressure declined to 7 or 8 cm. mercury, and Schlittenhelm has reported a decline to 4 and 5 cm. mercury. A further phenomenon for which Salomonson considers the undernourishment responsible was a weakening of the heart sounds at the base, evidently connected with the low blood pressure. The young and robust had their blood pressure decline the same as the elderly with pathologic vessels. Even with hard, tortuous vessels the pulse was remarkably weak. The circulation was thus below par throughout, and in terminal, more or less pathologic arterioles the circulation might die out completely. This is almost certain to entail arterio-thrombosis, and when this occurs in a cerebral artery a focus of softening results. The low pressure and the reduced pumping power of the heart deprive some of the smaller vessels of their full supply of nourishment. Among these the vasa vasorum suffer so that a vicious circle is set up. It is not a casual coincidence that the cases of softening of the brain have grown more numerous while apoplexy is becoming rarer. The prognosis according to his experience is much more favorable with the former than with the latter. Nearly all the cases of encephalomalacia improved notably under medical measures.

OBSTETRIC EXAMINATION

Jegge remarks that notwithstanding rubber gloves and all precautions, the morbidity of the puerperium still ranges from 5 to 20 per cent. He ascribes this to the woman's own germs, saying that it is absolutely impossible to ensure asepsis of the vagina. He tabulates the findings with 500 parturients examined internally with every precaution and 500 in which no attempt at internal examination was made. These figures include only spontaneous deliveries and no cases of laceration of the perineum. The morbidity was much higher in the internal group and also in the primiparae in both groups. His figures and experiences converted him to the necessity for refraining from internal examination, and he says that he has accomplished very nearly as much without it. He soon learned to tell by palpation from without whether the head was presenting or not, and how far down it had got and its position. With the hand on the perineum of the woman lying on her side, the palm on the lowest segment of the sacrum, the finger tips between the coccyx and anus, slowly pressing inward and upward during an interval between labor contractions, and then giving an abrupt rapid pressure, the hard head can be palpated if it is in the pelvic cavity or pelvic outlet. If the head with its longest diameter has not yet entered the small pelvis, then the findings with this back-of-the-perineum maneuver are negative. If a muscle interfers with it, telling the patient to strain gets this out of the way. This maneuver is particularly useful when palpation from the front is impossible on account of obesity or painfulness. It gave the desired information in nearly 95 per cent of his cases.—Jour. A. M. A., 9-6-19.

ICHTHYOL INTERNALLY IN URTICARIA

Espin reports six cases in adults and children in which marked improvement followed internal administration of ichthyol. In the first case the colored man had been tormented for nine months with intense itching, only briefly relieved by any measure. The itching was most severe in the palms and soles. It had begun eighteen months before, and of late it had become so intense that the man was unable to sleep. Espin gave him a pill of 0.25 gm. ichthyol and 0.10 gm. magnesium carbonate. He fell quietly asleep forty-eight hours later, and has had no signs of the urticaria during the year and a half since. In a case of urticaria following the eating of fish, the cure was not complete until ten days after the ichthyol had been begun. Others were cured in one or three days. The dose was reduced for a child of 9 to 0.15 gm. of the ichthyol and 0.05 of the magnesium carbonate. Espin does not attempt to explain the action of the ichthyol in these cases but his success in the otherwise rebellious cases speaks for itself.—Jour. A. M. A., 9-6-19.

NUTRITION OF FETUS

Slemons says that there is no diet specifically adapted to the state of pregnancy; the prospective mother may exercise the same freedom in the selection of food as any one else. She should, however, choose what will agree with her and avoid that which she cannot digest and assimilate. In a practical sense the quantity of the mother's food is more influential than its quality. Popular opinion holds that during pregnancy the mother "should eat for two." This doctrine is erroneous. A diet which has

previously been ample will likewise be sufficient throughout pregnancy. And, it is not unimportant to emphasize this view, which has the unqualified support of painstaking, scientific investigations, because overeating during pregnancy is much more likely to provoke discomfort than insufficient nourishment. On the other hand, there can be no justification for measures intended to restrict the growth of the fetus, for when rigidly carried out they tend to weaken the mother. She may be careful, in other words, to avoid overgrowth of the fetus but should not adopt a diet so limited as to interfere with normal development. So long as her health is properly maintained, no thought may be given as to what the size of the fetus is likely to be. At present, provided the physician determines by a thorough, preliminary examination the existence of any disproportion between the size of the fetus and the capacity of the mother's pelvis, he is qualified to decide what the appropriate treatment should be in order to bring pregnancy to a successful termination.—Jour. A. M. A., 9-6-19.

Surgery

PURE PHENOL IN FURUNCLES

Soresi treats them (Presse Medicale) in this manner:

Preferably a small glass Luer with a fine needle is used. The needle is gently inserted into the exact center of the boil, along the course of a hair follicle if possible. A small drop of phenol is injected. With a to and fro movement of the needle the entire boil is impregnated with the phenol, a small quantity being used.

If the process has not already extended to the point of destruction of the pilosebaceous follicle, complete relief and early cure may be expected.

ANESTHESIA BY INSUFFLATION OF ETHER OR ETHYL CHLORIDE THROUGH A CATHETER IN THE NASOPHARYNX

A. Malherbe and M. Boureau (Bulletin Medical, April 19, 1919) agree with A. H. Miller that ethyl chloride is a safer anesthetic agent than either chloroform or ether. For many years Malherbe has been using it for operations occupying three-quarters or even one hour. In operations on the face his customary "compress method" of using the anesthetic is inconvenient for the operator, and in such cases the authors have been using the following procedure, which is applicable to either ethyl chloride or ether: The patient is first placed under anesthesia by the compress method, a compress of cloth folded to four thicknesses and held in the shape of a cone being placed over the nose and mouth and two or three mils of kelene poured over it twice, at an interval of fifteen or twenty seconds. In a minute and a half or two minutes the patient is in complete resolution, with abolition of the corneal reflex and dilated pupil. A soft rubber Nelaton catheter, No. 20, with two openings at its tip, is then promptly inserted through the right nostril and pushed into the pharynx. The catheter is connected by a short glass tube with a rubber tube of the same diameter, sixty to seventy-five centimetres long, which in turn is connected with the outlet of a thermocautery apparatus provided with the usual rubber bulb. Anesthetic vapor is driven into the pharynx by pressure on the bulb every three or four seconds. A mark is

made on the catheter fifteen to sixteen centimetres from its tip, indicating the proper depth at which it should be introduced. The procedure has the advantages of simplicity and of introducing the anesthetic by the normal nasal route. Where the anesthetic tends to congeal in the cautery flash, a compress moistened with warm water may be wrapped around the latter. No vomiting occurs during the anesthesia, which the authors have already applied in a variety of cases.—N. Y. Med. Jour., 9-13-19.

INVERSION OF UTERUS

In Boyd's opinion hysterectomy is indicated when there exists gangrene or marked infection or a tumor of the uterus, but in clean cases it is unjustifiable. In the acute case, before involution is completed, the uterine musculature is still hypertrophied. It is pliable and will often yield to taxis. Manual reposition should, therefore, be tried in all such cases, but after a month or six weeks the uterus will have returned to its normal size and the tissues become firm and unyielding. In these chronic cases, manual reposition should only be carried out for a short time, if at all. By yearly operative measures, mortality and the comfort of the patient will be materially improved. Colpohysterotomy is, therefore, the operation of choice in the treatment of difficult cases. It is conservative, simple of execution and can practically be applied to all. Should the anterior operation fail, the posterior wall of the uterus could also be incised. This would undoubtedly make it possible to reposit the uterus. Anterior colpohysterotomy, the Spinelli operation, has certain advantages over the posterior. The field for operation is more accessible and suturing is facilitated.—Jour. A. M. A., 9-10-19.

LEWIS, F. O.: REMOVAL OF TONSILS AND ADENOIDS UNDER LOCAL ANAESTHESIA

(Therap. Gaz., 1919, xliii, 328.)

Lewis states the advantages of local anaesthesia as compared with general anaesthesia as follows:

1. With local anaesthesia there is less danger of starting up an old tuberculous lesion of the lungs which occurs so frequently when general anaesthesia is universally employed.

2. General anaesthetics have been known to produce nephritis, cardiac and respiratory failure, and insufflation pneumonia.

3. No cases of abscess of the lung have been reported following tonsillectomy under local anaesthesia.

4. It is available when general anaesthesia is contra-indicated as in chronic nephritis, respiratory disorders, pulmonary tuberculosis, etc.

5. Local anaesthesia has an advantage in the rapidity with which the operation may be done without the shock which follows a general anaesthetic.

6. When the case is uncomplicated, local anaesthesia is a time-saver and requires fewer assistants.

Local anaesthesia is contra-indicated in children under 10 years of age, in secondary operations, when there have been repeated attacks of peritonsillar abscess, and in highly neurotic adults or those with extremely sensitive throats.

One-half per cent novocain with 1 drop of 1-1000 adrenalin to each dram of the anaesthetic is preferred, one dram

of the mixture being injected between the capsule and muscle of each tonsil. The same solution is used for adenoids.

WOUNDS OF THE TESTICLE

Gunshot wounds of the testicle are not uncommon. As a rule, they are associated with other lesions of the urethra or the bony walls of the pelvis, and frequently are accompanied by wounds of the thighs. In exceptional cases the injury is limited to the testicles alone. The treatment to be adopted in this class of injuries must be pre-eminently conservative unless the organ has been completely destroyed and its preservation is absolutely impossible.

The utmost care should always be exercised to preserve, if not the entire organ, at least the larger portion of it. In other words, castration should be performed rarely and only as a last resort. In this connection, the author cites the case of a young soldier, 23 years of age, who was wounded by a bullet which passed through both testicles in such a way that after the wound had healed only two small stumps were left, evidently without any testicular secretion. In consequence of this injury, the patient sank into a state of extremely pronounced neurasthenia, with mental, moral, and physical depression of a very marked type. No internal treatment proved successful in restoring his previous state of health.—Med. Record.

SURGERY OF THE APPENDIX

J. H. Morford (Southwestern Medicine, July, 1919) advises operation as soon as the diagnosis is made. He divides the time for operation into four periods. The first is within the first forty-eight hours when the infection is usually confined within the appendix. The mortality of operations at this stage should be nil. The second stage is from the end of the second to the fifth day and is a dangerous time, and manipulations such as handling of the intestines and sponging, and breaking of adhesions must be carefully refrained from. The third stage from the fifth day on is comparatively safe, as by this time the patient has established an immunity by the blocking of lymphatics, and septic absorption does not take place. The fourth stage is that of the interval and would be the ideal time after the first forty-eight hours if we could order the kind of resolution we prefer; but so many hazardous steps intervene that no patient should be allowed to reach this stage without operation.

New and Nonofficial Remedies

Dr. De Sanctis' Gout Pills.—The American agent for these pills is E. Fougera and Company, Inc. When examined in the A. M. A. Chemical Laboratory they were found to contain powdered colchicum seed, benzoic acid and milk sugar. There was also present fatty material which resembled the fat of colchicum seed, but might be in part added fatty acid. It was concluded that De Sanctis' pills are essentially five grain doses of colchicum seed. Here then we have sold for self medication, an extremely poisonous drug with no warning of the risk the public runs in using it (Jour. A. M. A., July 19, 1919, p. 213).

"Accepted by the Council on Pharmacy and Chemistry."—The Council on Pharmacy and Chemistry of the A. M. A. is the department of our national or-

ganization that has not received the plaudits and encomiums of a widely joyous medical profession nor the grateful praises of the enthusiastic manufacturer of pharmaceutical articles. Perhaps the reason for this may be found in the character of its duties, for the Council must expose fraud, sometimes in high places, and protect the physician from being duped by avaricious persons and by persons who are themselves sometimes the victims of their own credulity. It thus happens that some proprietary article previously held in high esteem by the practitioner proves valueless, perhaps even fraudulent. The practitioner, however, may have credited much of his success in treating sick conditions to that preparation and the maker has had success in accumulating dollars from the sale, and both parties emit a loud and vicious roar against the Council because both lose money. Despite many obstacles the Council on Pharmacy and Chemistry has serenely pursued its allotted tasks and today stands as the only medium through which physicians may turn for information regarding proprietary articles. The words "accepted by the Council on Pharmacy and Chemistry of the American Medical Association" should be printed on the label and on all advertising circulars of proprietary articles that have been admitted to New and Nonofficial Remedies. Then, when pamphlets and circulars are received by physicians, they will read the statements of manufacturers with sympathetic understanding and with full confidence of their verity of declarations (Jour. Mo. State Med. Assn., July, 1919, p. 223).

Book Reviews

A text book of Physiology, for medical students and physicians, by William H. Howell, Ph. D., M. D., Sc., L. L. D., Professor of Physiology, Johns Hopkins University, Baltimore. Seventh thoroughly revised edition; Philadelphia and London. W. B. Saunders Company, 1918.

This treatise has so quickly reacted its seventh edition as to attract attention from this point alone, then showing its great popularity and proving its value in the estimation of the profession. We believe its intrinsic worth and reliability is such as to stamp it as one of the best books, if not the best, on the subject on which it treats. The author has, to a great extent, accomplished a seemingly impossible task—that of eliminating and selecting material for a treatise on a subject of such vast extent in such a way as not to sacrifice its usefulness to both student and practitioner. Chapter LIV on heredity—determination of sex—growth and senescene, much noted subject, is to say the least deeply interesting and in many ways instructive, while an appendix considering "Proteins and their Classification," presents many points of material important for the use of the general practitioner.

The Medical Clinics of North America, May 1919. Index number published by-monthly, by W. B. Saunders Company, Philadelphia and London.

Among the names of contributors to this number we note Lewellys F. Barker, Professor of Clinical Medicine, Johns Hopkins University; Visiting Physician to Johns Hopkins Hospital, Julius Freidenwald, M. D., gastroenterology, etc. Price $10.00.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 6 HUNTINGTON, W. VA., DECEMBER, 1919 Subscription $2.00 per Year
Single Copies 20 Cents

INDICATIONS FOR VAGINAL HYSTERECTOMY.

By C. M. Scott, M. D., F. A. C. S., Bluefield, W. Va.

Read at Annual Meeting West Virginia Medican Association, Clarksburg May, 1919.

Why do we substitute the vaginal for the abdominal procedure in hysterectomy?

In the first place the permanent cure of patient is of greater concern than to merely have her recover from an operation.

The removal of inflamed and suppurating tubes by the abdominal route, notwithstanding excellent immediate results, is in reality curative only to a certain degree—that is, 60 to 70 per cent of cases so treated, are relieved of the trouble for which they were operated upon,—Pus tubes.

We have been governed in selecting our case for vaginal hysterectomy from

Indications—Benign disease.

1. Bilateral infected tubes or tube.
2. Removal of uterus for persistent leucorrhoea in patients who have had both tubes excised.
3. Small sub-mucous or sub-serous fibroids.
4. Uncontrollable hemorrhage.
5. Fibrosis, (due to repeated miscarriages or labors.)
6. Fibrosis uterus with bilateral or stellate tear at or near menopouse.
7. Any symptoms suggesting malignancy in patient 45 years or over.
8. Varicocele of broad ligaments if near menopouse.
9. Tubercular endometritis.
10. Carcinoma of the cervix, so long as uterus is movable, and no enlargement of inguinal glands, and no palpable extension involving broad ligaments. It is to be remembered you should always make rectal examination to determine the amount of induration of broad ligaments. If the latter is present, ureters should be catheterized.

11. Any case who should not have children, for example, tuberculosis nepliritics, and you wish to ligate the falopian tubes.

12. Obesity.

Contra-Indications

(a) Large fibroid.

(b) Prolapse uterus with bladder, vagina. (This in only contra-indication for clamps.)

Dense adhesions high in pelvis.

We feel from our experience with vaginal hysterectomies, we are able to formulate the following:

1. You may at any time convert a vaginal section into a laporatomy, therefore, a culdesac opening oftentimes enables you to differentiate pus tubes from appendicitis, also ruptured tubal pregnancy from incomplete mis-carriage.

2. In removal of tubes and uterus in bilateral infected tubes, the uterus should be removed, as it is source of infection, and will continue to cause vaginal discharge so long as it remains.

3. In supra vaginal amputation for any reason by the abdominal route, you leave cervix, a source of constant danger, to patient, viz: carcinoma.

I have had in the past five years, three patients with inoperable cancer in cervix, who had had supra vaginal abdominal hysterectomy.

Small cysts and tubes can be removed without removal of the uterus. No scar, no danger of ventral hernia.

Patients more readily consent to operation.

The disturbance caused by operation itself, is much less in vaginal than by abdominal route.

No shock, convalescense is more smooth, duration is relatively and absolutely shortened, mortality is less.

By abdominal route, complete 12 per cent.

Incomplete, 4 per cent.

Mortality in vaginal is less than 2 per cent.

Our conclusions are based on our observations on 106 cases in the last six years.

SUPPURATIVE PLEURITIS, THE SURGICAL TREATMENT.

By Thos. L. Harris, M. D.

Read at Annual Meeting, West Virginia Medical Association, Clarksburg, May, 1919.

The material for this paper is based on a series of cases of Pleuritis following a distinct mode of infection, namely: Influenza followed by Pneumonia with a complicating Purulent Pleuritis.

It is important to remember that the ultimate outcome of Suppurative Pleuritis is to a large degree dependent upon the antecedent infection, and equally so should the methods of treatment be classified as to the mode and type of infection.

I have purposely omitted the term Empyema in this paper, to distinguish that type of Pleuritic infection, following the Secondary pneumonia of Influenza, and have termed it Suppurative, or Purulent Pleuritis in contradistinction to Empyema or that type of pleuritic infection following a Primary pneumonia.

It is perfectly obvious that a patient who has weathered the storm of Epidemic Influenza with a Secondary pneumonia and then develops a Purulent pleuritis is in much poorer physical condition than the patient who has an Empyema following a Primary pneu-

monia, therefore, our method of treatment should be selected accordingly.

A review of the literature of the past reveals two principle methods of treatment:

(1) Open methods, either by rib resection or Intercostal Thoracotomy with permanent drainage.

(2) Closed methods by repeated Aspirations.

To intelligently treat pus in the pleural cavity one must understand the mechanism of respiration and the general pathological findings in the several types of infection.

We know that if the normal pleural cavity is opened and left open the air from without rushes in and by positive pressure causes the lung to collapse on the injured side and also embarrasses the opposite lung and likewise the circulation.

Studies at the autopsy table have shown us that the pus of pneumococcic origin is formed and walled off early, while that of Streptococcic origin, though the infection is rapid and the exudatiin profuse, actual pus is late in forming and the walling off is still later.

Bearing the type of infection and its pathology in mind, we should select that surgical proceedure best suited to each particular case.

In presenting the following series of cases, I wish to call your attention to the fact that not a single case was treated by rib resection or open thoracotomy, but were all treated by repeated aspirations or the semi-closed method.

Total number of cases 37
Total number of deaths 0

All these cases followed the epidemic.

Time elapsing between the onset of illness and recognition of the Pleuritis with exploring needle.

Minimum ..... 7 Days.
Maximum ..... 50 Days.
Average ..... 26 Days.

Time elapsing between the recognition of the Pleuritis with the exploring needle and admission to the surgical service.

Minimum ..... 1 day.
Maximum ..... 20 Days.
Average ..... 7 Days.

Aspiration of the pus was repeatedly practiced before drainage was instituted, six cases apparently recovered without permanent drainage. The average period required for these cases was 28 days.

Thirty-one cases were drained by intercostal incision and suction drainage by a syphon. These cases were subject to removal of pus by aspiration, preceeding drainage, on an average of two and one-half times. The maximum number of aspirations was five. The average time interval between the recognition of pus with the exploring needle and continuous drainage was 17 1-3 days.

The character of infection was: pneumococci, 15; streptococci, 6; strepto pneumococci, 8; streptococcus hemolyticus, 2; strepto, pneumo, staphylococcus, 1. No growth found, 5. Streptococcus was controlled more effectively by the hypochlorite solution than was the pneumococcus. The nebulized vapor of a 5 per cent solution of dichloramine seems to be equally effective against both the pneumococci and streptococci.

METHOD OF DRAINAGE

The site of the drainage is indicated by the physical signs and radiography, it is determined by needle puncture. The point of selection is the eighth interspace in the scapular line, (deepest part of the costal gutter). The exploratory needle attached to a syringe containing novocaine, which is injected as

the needle is pushed in, is introduced through a tenotome skine puncture until lost resistance and suction of pus has shown that it has entered the suppurating cavity. It is left in situ the depth to which it has penetrated to reach pus being measured. Under a one per cent local novocaine infiltration anæsthesia, a one inch incision is made with a bistory through the interspace to the pus cavity. The finger is immediately inserted into the pleural opening preventing the entrance of air. A heavy walled rubber tube with a luman of one quarter inch is introduced through the opening as the finger is withdrawn. The tube is then fastened to the chest wall by means of silk worm gut sutures which pass over cork threaded over, and closely fitting the tube. The flat cork is fastened to the chest wall by means of broad strips of adhesive plaster. Suction is established and maintained by connecting the distal end of the thoracotomy tube to a two-foot column of water in a rubber tube whose distal end dips under water in a Wolff bottle. The maintainance of negative pressure in the chest wall is effectively indicated by the occillations of the column of water in the rubber tube syphon which is attached to the interthoracic drainage tube by means of a glass Y tube connection. One branch of the glass Y tube is attached to the irrigation reservoir containing Dakins solution of Hypochlorite and the inflow controlled be means of a clamp. When the pleural cavity is to be irrigated the syphon is clamped off close to the Y tube connection and the tube from the hypochlorite reservoir is unclamped and the desired amount allowed to flow into the cavity at a low pressure, (about 12 or 15 inches drop). The flow is then stopped and the solution allowed to remain in the cavity for one half an hour.

The clamp on the syphon tube being removed the suction is reestablished and the negative pressure maintained. It has been found that each 10 inches of water in the tube of the caliber in these cases (¼ inch) equaled 10 mm. Hg. The negative pressure in the pleural cavity was found to equal from 3 to 8 mm. Hg. The suction exerted by the 2-inch syphon was therefore not sufficiently strong to traumatize or even to ease pain but nevertheless caused a constant elastic pull tending to keep the lung expanded in the pleural cavity.

CHARACTER AND QUANTITY OF EXUDATE

The heavy, creamy exudate of the pneumoccal infection becomes a thin, clear, dark amber colored fluid after 14 days.

The quantity of the exudate varied greatly according to the size of the cavity; at the end of 14 days the average quantity has been about 100cc.

BACTERIAL CONTENT OF EXUDATE

After beginning the instillation of the hypochlorite there is a constant decrease in the bacterial content of the exudate; this decrease however, has not been so marked with the pneumococci as with the streptocci. In but one case have we been able, with the hypochlorite solution, to obtain surgical sterility in 14 days.

In two cases in which the nebulized Dichloramine T replaced the hypochlorite, surgical sterility resulted after 48 hours.

COMPLICATIONS

Three cases had pulmonary fistulae when the pleural cavities were opened. The instillation of the hypochlorite solution resulted in such distressing paroxysms of coughing that its use had to be discontinued.

However, the nebulized vapor of Dichloramine T caused no irritation and has been used with satisfactory results.

Two of the cases developed phlebitis, one of the left arm, one of the left arm and left leg.

CONCLUSIONS

1. The toxicity and pathology of pleuritis are dependent upon the type of the organism. Two cases of the streptococcuc hemolyticus in this series were corroborative evidence of the value of the treatment by multiple aspiration, continued as long as the toxic symptoms and pressure symptoms are ameliorated and followed by continuous drainage when aspirations are no longer adequate.

2. The surgical treatment of suppurative pleuritis is modified by the pre-determined quantity of the exudate its toxic properties, its presure effects and also by the condition of the resistance of the patient.

3. The best surgical treatment for pneumococci and streptococci infection, other than the hemolyticus is prompt drainage. A profound toxic condition may indicate preliminary aspiration.

4. Drainage of the infected pleural cavities should be adequate, continuous and should minimize pneumothroax. This is attained by intercostal incision and the introduction of a rubber drainage tube through an air-tight wound.

5. Adequate drainage and negative pressure can be assured by a gravity suction apparatus provided the exudate is fluid.

6. A fluil exudate can be assured by a second hourly instillation of Dakins hypochlorite solution. This solution acts at the same time as a weak germicide. After the complete solution and discharge of the fibrinous exudate, the Dakins solutions should be replaced by the larger germicidal, provided by the nebulized 5 per cent solution of Dichloramine T.

7. The advantages of this method of drainage are:

(a) Avoidance of general anaesthesia.

(b) The elimination of the shock which frequently follows the pain of rib resection and always results from sudden and complete pneumothorax.

(c) The usual post-operative comfort of the patient as compared with the discomfort of those suffering from the sucking wounds following rib resection.

(d) The cleanliness made possible by the exudate escaping into a bottle.

(e) The protection of the pleural cavity from secondary infection,—for none of this group of cases had a secondary infection.

(f) The rapid expansion of the lung following pleural drainage by this method makes sure a short period of recovery and better end results, than are obtained by methods of drainage producing pneumothorax.

(g) A satisfactory morality: No deaths in 37 cases.

RAT BITE FEVER

By T. A. Post, M. D.,
Clarksburg, W. Va.

Read at Annual Meeting West Virginia Medical Association, Clarksburg, May, 1919.

Rat bite fever is an infectious disease which sometimes follows the bite of a rat, or still more rarely, the bite of other animals having contact with rates, such as the ferret, weasel, or cat.

The wound usually heals promptly and the patient feels in usual health

and, perhaps, the physician congratulates the patient on the apparent results.

However, in about two weeks, (although the incubation period may very from one to 60 days), the temperature rises gradually; the patient chills and usually becomes very nervous; has severe muscular pains; and enlargements of subcutaneous lymph nodes, especially those nearest point of infection.

The maximum of all symptoms is usually reached on the third day and the temperature falls, by crisis, with profuse sweating.

As a rule there are many of these paroxysms, which tends to recur with remarkable regularity at intervals of 5 to 15 days.

During these intervals the patient, in a mild form of infection, may insist on being well and return to work; while in a severe form of infection, there is a progressive emeciation and weakness.

This is the usual form of the disease, but cases have been reported with a continual fever for several weeks and be of a remittent or intermittent type.

Abortive forms have been reported with a low fever and local symptoms predominating.

An afebrile form has also been reported with nervous symptoms outstanding.

The eruption is characteristic and may be either local or general.

The local occurs, as a bluish red erythema with sharply marked outlines surrounding the wound and may be seen in skin over lmyph nodes nearest point of infection.

The general may occur anywhere on the body in numerous bluish red spots; slightly raised, circular in shape with sharply defined margins; will disappear on pressure; has a tendency to become ring-shaped, as in the case of a ringworm, and varies in size from a pea to a silver dollar.

There are at present on record less then one hundred cases, consequently there must be only a few practicing physicians who has been fortunate enough to see and recognize a case of rat bite fever.

However, the rat is a very prolific animal with great possibilities, as it has been estimated that one pair of rats left unmoleted and barring fatalities, will multiply in three years to the handsome army of more than 300,000,000, which would make a yearly average of about 1000,000,000, and a daily average of about 300,000, so you can get a birdseye view of what might happen.

For instance, suppose it be possible, and the rat kingdom should become afflicted with rabies, or a mixed infection of general spirochetosis and rabies; I am of the opinion that "Uncle Sam" with the rest of the world as his allies, would have the battle of his life.

However, only a part of the rats caught at random were able to transmit the disease to other susceptible animals but those that were able to transmit the infection to another suspectible animal, by bitting them, could infect any number by the same method.

The guinea pig has many of the same symptoms which are manifested in man and are able to transmit the disease and thus become a carrier as well as a victim, while the rat is only a carrier and apparently does not suffer from the disease.

The disease is most common in Japan among the class of people most exposed to and most liable to be bitten by rats, although an occasional case is reported from points in both hemispheres and among all classes of pleople.

It has only been in the last six years

that the medical profession has had its attention drawn to this newly recognized disease and while much has been done in the way of recognizing and properly treating it, there are still many things undertermined and unsettled.

Following are questions which are predominating to the writer:

(a) Can one person suffering from the disease infect another and if so by what different modes?

(b) Is a rat once a carrier always a carrier and what per cent of the rat kingdom is it possible to become carriers?

(c) Is it of an epidemic nature among rats, occuring in certain breeds or in all; and is it more prevalent in certain places, in certain seasons or in certain years?

(d) Is the much tutored spirochete the specific cause of rat bite fever and what relation is it to syphilis?

In the three cases which I was fortunate to see and recognize, two occured in the same neighborhood within ten days of each other and in both cases the rat was killed, so it was not the same rat that bit the two; the other case was about one mile distant and occured about two weeks later.

All three cases were typical and easily recognized after the first case was diagnosed, however, diagnosis of atypical form is often very difficult, even to those most experienced.

But as the literature is limited, recognized cases few, and if you have never seen a case, especially if you have no history of the patient being bitten by a rat, it is quite possible to diagnose the case as intermittent fever, or any of a number of other fevers and treat the patient until they recover or die and never be the wiser of the real infection, and even when very familiar with the disease, questions will arise in atypical forms which may cause much study to make sure of the diagnosis is correct, especially if you are unable to get the service of a pathologist.

Perhaps, one per cent or one out of a hundred physicians have seen, recognized and treated a case and while this may or may not be very accurate, I dare say that fifty per cent or one half of physicians, doing a general practice over a period of 10 years, have seen and treated rat bite fever in some form but never dreamed of the real bug.

ETILOGY

The consensus of opinion as to the cause of rat bite fever, is the inoculation of a person with a specific spirochete, very similar to the one found in syphilis, by the bite of a rat, having a generalized spirochetosis.

The Streptothrix Muris Ratti, of Schotmuller and Blake, received attention and had some following, but they were unable to transmit the disease to other susceptible animals.

The best bet is the spirochete as it can be found in the wound, in the lpmyh nodes, in the blood and in other parts of the body of a patient during paroxysm, can be transmitted from one to another susceptible animals and may be so continued to any number, forming a chain of infection, furthermore the treatment used to combat the spirochete gives excellent results, especially is this true with Salvarsan which is considered almost a specific.

DIAGNOSIS

Rat bite fever is distinguished from other infections by the history of a rat bite, the form of the temperature curve with the striking regularity of paroxisms, followed by crisis on the third day with profuse sweating, the presence of the characteristic eruption with other

symptoms mentioned above and the finding of the spirochete.

PROGNOSIS

The mortality of the number of cases reported of which there are less then 100, is about 10 per cent.

However the per cent of mortalities during the last three years would be much lower due to our increased knowledge of the disease and especially the treatment.

TREATMENT

The proplylactic treatment of rat bite is immediate and thorough cauterization of wound which may prevent infection.

However, this should not be considered positively preventative as there are no cases on record, to my knowledge, where an infected animal has bitten a susceptible animal and the infection prevented by cauterization.

One of the most common mistakes in the treatment is to open and cauterize the wound after the infection has been established, as it causes unnecessary pain, unnecessary shock, to the patient, and many unnecessary dressings.

It would be using just as good judgment to open and cauterize a Luetic gummata with the idea of assisting the patient to recovering from the third stage of syphilis.

The real treatment consists of the care you would give any ordinary case of relapsing fever, plus, the medication used in syphilis.

Salvarsan is considered almost a specific and is no doubt the real mode of treatment.

One intravenious injection is sufficient in about 80 per cent of cases, some cases require more, and some cases never entirely recover, regardless of the number of treatments of salvarsan.

ACUTE NEPHRITIS

By E. S. Hamilton, M. D.,
Oak Hill, W. Va.

Read at the meeting of the Fayette County Medical Society held in Oak Hill, November 11, 1919.

Indeed, I trust that you will appreciate the fact that it is very difficult to select a subject which would be of interest to all members of this Medical Society. However, it might not be amiss to give some of the latest dope on that ever present disease known as, Acute Nephritis.

Acute inflamation of the kidneys is usually seen in children and young adults, and is usually caused by some acute infection as, scarlet fever, diptheria, measles, cerebro-spinal meningitis, typhoid fever, small pox, yellow fever, any septic infection, serious burns, erysipelas, universal eczema, various poisons, especially the metallic poisons. At times it begins without apparent previous cause, and in these cases is supposedly due to exposure to cold, however, cold does not ordinarily have such serious effect. I have very recently seen and treated two very bad cases which were caused by follicular tonsillitis. Both of these cases were in male children, one 9 years old , and the other 11 years. The nephritis did not show up for about one week after all apparent inflamation in the throat had disappeared. Both recovered entirely. The apparent onset may be sudden with edema which generally develops in twenty-four hours, being the first symptom, or the inflamation may be preceded by a chill, followed by a slight temperature. Nose bleed may occur, followed by hemorrage into the retina, and

if the amount of blood and albumin lost by the kidneys is great, anemia will rapidly follow.

Inflamation of the kidneys is attended by the usual local symptoms accompaning any inflammation. There is an increased blood supply, swelling of the kidney, exudate into the tubules, and impaired kidney function. The urine is diminished in quantity and becomes concentrated; albumin, casts and blood appear, and later suppression is the eventual stage. Associated with these symptoms there is headache, vomiting, and often a diarrhea. There may be no temperature unless the acute nephritis is a complication of a condition that was already producing fever. There may be an increase or decrease in the pulse rate. Increased cardiac action the the usual thing. A certain amount of edema occurs its seriousness depending on the region of the exudate; edema of the lungs or brain may develop. The blood pressure generally rises, and with suppression of the urine, uremia with all its symptoms and dangers will probably result.

When acute nephritis is a complication of some other infection or general condition the symptoms will be modified by those of the associated disease; but when acute nephritis is the principal condition, if the patient is to recover, the kidneys begin to functionate and a small amount of smoky, muddy urine loaded with hyaline, granular, epihelial, and blood casts is passed. This urine will usually be of very high specific gravity, containing a variable amount of albumin, but at times may be so much that the urine may become jelly-like upon boiling. I remember one case occuring in my practice which was as described. Upon boiling the urine in a test tube same had to be shaken to rid the tube of its contents. The casts, albumin, and edema gradually diminish and the patient slowly becomes convalescent. The excretion of chlorides which have at first been absent from the urine gradually increase as the edema lessens. As stated above the urine generally shows a high Sp. Pr., however the total amount may show a greatly diminished excretion of solids, while the blood retains non-protein nitrogen.

If the nephritis is a complication, for instance, of scarlet fever, the skin may show the eruption of scarlet fever. However, if the nephritis is not caused by an eruptive disease it will probably show an uriticaria, or be accompanied by itching of the skin, or by severe eczema. Forerunners approaching uremia are eye blurs, retinal changes, severe headache, momentary loss of consciousness, muscle twitching, cramps, and eventually convulsions and coma.

When cerebral symptoms announce the beginning of acute nephritis, the prognosis is very unfavorable and the patient may succumb in a few days; while in mild cases the inflammation may last for several weeks. Whether the kidneys will again become entirely normal cannot be determined for several months, as small amounts of albumin and casts may persist in the urine for weeks and months, and yet the kidneys will finally return to a healthy condition. This is especially true in children.

The first intimation of acute nephritis may be general edema with few or no other symptoms. Backache is not necessarily an accompanying symptom of acute nephritis. Acute nephritis may be super-imposed on chronic nephritis due to some infection, carelessness in diet, irritant drugs, exposure to cold, etc. Acute nephritis super-imposed on chronic nephritis is a serious condition,

and may be rapidly fatal. Here it might not be amiss to call your attention to the fact that all cases of syphilis treated by salvarsan and other arsenic preparations should first be carefully tested for kidney disease, especially for albumin and for their excretive ability.

TREATMENT

The treatment of acute nephritis requires immediate bed rest in a warm, but properly ventilated room. During all acute diseases, especially those known to cause kidney irritation as, scarlet fever, erysipelas, etc., the urine should be examined daily. Especially the urine is to be watched in severe burns and poisoning, especially the metallic poisons, as bichloride of mercury. In acute diseases the irritant articles of diet, phenol compounds, synthetic drugs, irritant diuretics, aromatics, coffee, tea, and alcohol should be strictly withheld. Observations of these cautions may prevent many kidney complications.

Cold sponging and the ice bag should be watched. Warm sponging is often as efficient as cold sponging in feverish processes. Chilling of the body from any means should absolutely be prohibited, although he should have fresh, cool air to breathe. Baths should be taken in warm or hot water, as this promotes normal perspiration and tends to relieve congestion of the kidneys. Anything which will inhibit the secretions of the skin or cause the skin to become cold and dry increases the congestion of the kidneys. From this you can readily see the danger of injudicious use of pastes and greasy lotions commonly applied by the laity and some members of the medical profession in the treatment of acute infectious diseases. See to the fact that the pores of the skin are kept open and not occuluded by some sort of a worthless preparation lauded by some patent medicine concern.

Meat proteins should especially be avoided as soon as traces of albumin are found in the urine, and the diet should become more and more rigid, according to the extent of the inflammation. The proper diet in acute nephritis is milk, or a food of the same general character. If milk is not tolerated, thin gruels, as oatmeal or malted milk, cereal milk, etc., may be substituted. Barley water is a good beverage and has a limited amount of nutritive properties. Sedium chloride should almost be entirely removed from the diet. Nephritis patients usually suffer greatly from thirst. The amount of water advisable varies with the condition. Theoretically we should allow a considerable quantity to wash out, if possible, the plugged-up tubules of the kidneys. Practically, however, if edema is extensive, much water should be avoided, although, if the circulation is sufficient, pure water in a salt free diet perhaps does not tend to increase the edema. Imperial drink made by adding a teaspoonful of cream of tartar to a pint of boiling water adding the juice of a small lemon and a small amount of sugar, and served cold is a very agreeable beverage and a non-irritant diuretic.

If the patient's stomache is disturbed, a short starvation period is advisable. Do not extend this treatment far as it tends to acidemia, which in turn would add its quota to already present toxins. Liberal quantities of hot water may be given to relieve the vomiting. Chipped ice may act better than the hot water. Should this not relieve fifteen grains of bismuth subcarbonate and sodium bicarbonate should be given every three hours until the nausea and vomiting cease.

In the treatment of acunte Nephritis we have four indications to meet, viz: First: Promote elimination during the period the kidneys are inefficient, and this is met by keeping the body warm and by the use of hot sponging. Profuse sweating is not indicated except by such means as hot drinks and warm applications to the kidneys over the lumbar region. A few grains of calomel followed by a saline or castor oil will remove from the intestinal canal all substances which tend to the production of toxins which may be absorbed into the blood and increase the toxemia. If the patient is a child aromatic rhubarb may be used as a purgative. Daily movements of the bowels is indicated, but not more than two or three loose movements, and if the heart is weak this amount of catharsis may be contra-indicated. Enemas for purgation may be substituted for cathartics. Diuretics should not be given, with the exception of pure water, or possibly a water containing some simple alkali, such as potassium or sodium citrate, or acid fruits which burn to alkali, such as oranges and lemons. The juices of these fruits are beneficial as well as very acceptable to the average patient.

To meet the second indication, the patient should be kept physically and mentally at rest. The more restless the patient, or the more muscle movements he makes, the more products of muscle metabolism reach the blood and must be excreted. Minimum quantities of all foods, particularily those containing protein, should be consumed, so that the kidneys may have the least possible amount of waste products to care for. If the patient vomits, for a short while all food should be withheld. The stomach may be washed out with hot water, or may be given bismuth subcarbonate and sodium bicarb, as stated above. Starvation should not be continued long as it tends to the production of acidosis and symptoms of uremia; therefore, bland starchy foods should be given as soon as possible. If the patient is unable to retain them, alkalias, such as sodium bicarbonate or sodium citrate in weak solutions should be introduced into the colon. If the patient is restless and cannot sleep, it may be advisable to give small doses of chloral or sodium bromide, but synthetic drugs, or coal-tar products, or anything that forms hematoporphyrin during its elimination through the kidneys, such as sulphonal, trional, and drugs of this type, should be avoided.

To allay the inflammation, if possible, and to hasten the stage of resolution, marks the third indication in treatment. This is met by warm applications to the lumbar region, moist warmth in this region being of especial benefit in acutely congested kidneys. Hot fomentations of alcohol and water bound to the back and held in place by a roller bandage around the abdomen; a hot water bottle placed over same, and changed as soon as cool is a very convenient and effectual method of applying such heat. The old-fashioned flaxseed poultice, if properly made and kept warm, is of great benefit. Later, the moist heat may be changed to dry heat by means of an electric pad; this brings about local hyperiemia and in a reflex way gives relief to the kidneys. When the patient is kept warm, fomentations like these mentioned above cause perspiration, though not the profuse perspiration of the Turkish bath, caused by steaming, or by dry hot air introduced under the bed-clothes. Profuse sweating is rarely necessary, as it can do little more than eliminate from the blood large amounts of water, and

the toxins retained in the blood in nephritis and in uremic conditions consequently become more concentrated. On the other hand, profuse perspiration sometimes causes the blood to absorb water from edematous tissues, which will counteract the concentration of the poison in the blood caused by the perspiration. If prostrating perspiration is caused by these applications it is best to discontinue them and rely upon the more modified heat of an electric pad

This treatment, if successful, finally brings about an increase in the amount of urine passed, then the amount of blood in the urine is diminished, less albumin appears, although the urine may be loaded with casts, the edema and dropsy disappear, and the patient becomes convalescent, although edema may persist for weeks and albumin may not disappear from the urine for several months. However, in kidneys which were normal before the attack of acute nephritis, the albumin, casts, and edema generally disappear in five or six weeks.

During the convalescent period the diet is gradually increased, although meat proteins and nuclein foods are still forbidden. In other words, when the edema disappears allow the patient bread two days old, rice and other cereals cooked in a double boiler for at least three hours, an Irish potato slow baked for four hours, and give less milk. The amount of sodium chloride may now gradually be increased in articles of diet.

Owing to the fact that meat has been with-held from the diet over a long period of time it is advisable to give Iron in the most absorbable form. I usually prescribe liquid blaud (Plain-Lilly)' however, the tincture of the chloride, five to ten drops, in orangeade or lemonade is quite alright. After the albumin has disappeared from the urine, or after two months, small amounts of meat once each day may be allowed. Eggs, simple vegetables and fruit should be added to the diet even before the albumin has entirely disappeared. When meat is allowed—including fish, chicken and other fowl, all beef extracts, beef broths, and beef stock soups should be prohibited.

During the convalescent stage the patient may be allowed to sit up, walk around the room, and gradually about the house, but should not be exposed to cold, or allowed to attempt more than moderate muscular exercise. His bowels should move once daily and for this purpose, if necessary, cascara is the drug of choice. Children may be given milk of magnesia or some other simple laxative.

If the albumin and casts entirely disappear from the urine in six or eight weeks the patient may be considered cured. However, severe exercise, overindulgence in food or drink, or severe chilling of the body should be guarded against, lest the injured kidneys again become impaired.

If the albumin and casts continue, or if the twenty-four hour urine shows continued diminished excretion of salts or solids, although the blood may not show retained nonprotein nitrogen, the treatment of the case becomes that of chronic nephritis.

The prognosis of acute nephritis depends entirely on its cause, but a case should never be considered hopeless. The patient may die, but with proper treatment he may recover, even from severe uremia, convulsions, and clma.

Nephritis of scarlet fever is of great importance, owing to the fact that it is usually insidious in development, occuring not only days, but weeks after the

acute scarlitinal symptoms have subsided. Uremia may not develop with temporary suppression of urine, still it may develop without apparent premonitory symptoms; however, ordinarily symptoms appear hours or days before uremia develops.

If the kidney secretion contains a great deal of blood, gelatine and lime water may be prescribed. Gallic acid apparently, at times, diminishes the loss of albumin and blood from the kidneys. If the blood pressure is low and the heart weak, congestion of the kidneys may be due to passive congestion, and is alleviated by the judicious administration of digitallis. It should be carefully watched as, in impaired kidneys it may overact, causing vomiting, headache, too high tension, and at times symptoms of uremia. This type of acute nephritis, almost a passive congestion nephritis, not infrequently occurs in cardiac lesions, especially in valvular defects, and may be the drug required to relieve the congestion and stop the bleeding.

If the blood pressure is not very high, suprarenal gland extract may be of value in stopping the loss of blood by the kidneys, especially is this true in children.

If the blood pressure is high, nitroglycerin gr. 1-100, every three hours, seldom fails to lower the blood pressure somewhat. Venesection may be employed in adults when hypertension is menacing. It may also be employed in severe uremic symptoms, or when convulsions or coma is in evidence.

If the circulation is poor during convalescence, the amount of urine being insufficient for this reason alone, and if digitallis is deemed inadvisable or inefficient, caffeine in some form is the drug of choice. Personally I use the citrate, but there is no reason that I can see why he should not be allowed a palatable cup of coffee.

Throughout the course of acute nephritis , if the patient is comfortable he will probably sleep well. However, if he is nervous and irritable and cannot sleep, sleep must be induced in order that he may have the bodily and mental rest required. Small doses of verenal-sodium, or if the patient is irritable, nervous and the circulation is good a half dose of chloral and sodium bromide may be employed as a hypnotic.

Opium or any of its alkaloids are generally to be avoided in acute nephritis. However, if pain is acute it may be given, as acute pain can do more harm through circulatory shock, mental anguish and muscle restlessness than can possibly be done by a proper dose of morphine or codeine.

If acute nephritis develops in the course of some severe infection, the treatment necessary to combat the infection should be given, but same to be modified in the manner suggested by the condition of the kidneys. All vaccine injections would probably be contra-indicated.

As soon as the patient is convalescent, warm baths should be regularly taken in order to keep the skin in perfect health and to relieve internal congestion. When convalescence is well established, if it is during the cold season of the year, the patient should, if possible, go to a climate where it is warm and dry, and remain there until the kidneys have again resumed their normal activities.

The fourth indication in treatment, namely, the prevention of uremia has been dealt with. By proper treatment of the patient uremia is often avoided. I will not prolong this paper by entering into the discussion of uremia.

RETROPHARYNGEAL TUMOR REPORT OF A CASE

By M. E. Steinberg, M. S., M. D., A. A. Surgeon, U. S. P. H. S.

Base Hospital, Government Explosive Plant, Nitro, W. Va.

Private Cecil A. Pote, 20 years old, was sent to the Base Hospital by the company physician with the diagnosis of a retropharyngeal abscess. The patient came in complaining of headache, pain in both angles of the jaws and difficulty on deglutition; these symptoms having started only three days before the date of admission. At no other time has he had such trouble as tihs.

The highest temperature was 100.2; highest pulse, 100; respiration, 20.

LABORATORY FINDINGS

White blood count 12,000

DIFFERENTIAL

Lymphocytes 35%
Transitionals 3%
Polymorphonuclear neutrophils 62%

URINE

Clear.
Acid reaction.
Specific gravity, 1025.
Albumin, trace.

The physical examination was negative with the exception of an asymmetry of the posterior wall of the pharynx. The right side of the posterior pharyngeal wall bulged and encroached deeply upon the naso pharynx. The tumor was hard, the size of a walnut, limited on one side by the uvula and on the other side by the anterior tonsillar pillar. The posterior pharyngeal wall was freely movable over the tumor, and the mucous membrane overlying was of normal appearance.

The tumor was removed under local anaesthesia; it shelled out very easily. It was hard, round, measuring 2.6 cm in diameter and 1.6 cm deep. The microscopic examination revealed this to be a lymph gland. The lymph sinuses were distended with leucocytes, red blood cells and proliferated and desquamated endothelial cells. The follicles and cords were increased in size.

COMMENT

An extensive epidemic of parotitis was prevalent at this station and in the barracks from which the patient came at the time the patient was admitted to the hospital. The fever, rapid pulse, pain in the jaws, trace of albumin in the urine, with the prevailing epidemic, would strongly indicate that this was primarily a case of parotitis without visible swelling of the salivary glands.

The enlarged lymph gland removed apparently belonged to the retropharyngeal group of glands which lie behind the pharynx.

The case is reported chiefly because no mention has apparently ever been made of an enlarged lymph gland of the retropharyngeal group to be differentiated from the retropharyngeal abscess. The case is also of interest because this was evidently a case of parotitis without any visible enlargement of any of the salivary glands.

CLINICAL WEEK

By J. E. Cannedy, M. D., Charleston, W. Va.

The last meeting of the Clinical Congress in New York was quite a success from the standpoint of numbers in attendance and clinics furnished by the local members of the profession. At these meetings the program offered is

so varied and extensive that it is naturally impossible for any one visiting physician to take in more than a very small part. I note the following i tems of interest:

Sir Robert Jones of Liverpool, joint ankyloses with reference to fractures, he, as well as most other orthopedists, attaches great importance to the early and frequent mobilization of the joint. The so-called passive motion is not only carried out by the patient, but by the attendants in the ward in order that there shall be no opportunity for a stiff joint or a joint with limited motion. He does not make use of plaster paris casts save in exceptional cases, but makes use of splints of various kinds for the purpose of fixation.

Sir Anthony Bowlby, the present Surgeon General of the British Armies, read an elaborate address on the subject of fractures of the femur. He makes frequent use of caliper traction along with the Balkan frame and finds no particular difficulty in preventing shortening of a broken leg, in fact, he mentioned several cases in which the broken leg was longer than the sound one after union had taken place. He further stated that actual loss of bony substance is not a bar to the maintenance of full traction for the reason that there is a considerable outgrowth of new bone from the fractured ends, and this along with what periosteum may be left is sufficient to bridge the gap. He gave some interesting statistics concerning the results in treatment of fractures occurring in the British Army. During the first year of the war many cases had gotten a considerable amount of shortening, but at a later period with the improvement in technique the average amount of shortening was less than half an inch. During the discussion it was brought out that the treatment of fractures of the American Army had been so efficient that there had been only 4,000 amputations in the American Army out of nearly 300,000 casualties.

Dr. Hibbs is doing most excellent work at the New York Orthopedic Hospital and is securing very wonderful results in the treatment of cases of scoliosis, in children especially. He is of the opinion that nearly all of these cases are due to infantile paralysis affecting some of the back muscles, and that the condition, as a rule, bears no relation to tuberculosis. A typical case of this sort is treated by traction from the head and pelvis, about 30 to 35 pounds being the usual amount of extension. This is kept up for three or four weeks, then Hibb's special operation for spine fusion is done. This spine fusion, in the opinion of its originator, is infinitely superior to any bone transplant procedure for that purpose, and it seems that this line of reasoning is quite rational for the reason that Hibbs gets ankylosis and and fixation at least three points for each of the vertebrae as opposed to fixation at one point by the Albee graft. He also does a fusion of the knee joint for tuberculosis or incurable arthritis caused by other infections. His method of fusion in this joint is quite simple, most effective and much less dangerous than the usual resection of the knee.

Hibbs is an artist when it comes to a bloodless reduction of chronic luxated hip joint. I am quite sure that neither Hoffa with his open method, nor Lorentz with the closed method have anything on him.

Lewishon gave a demonstration of his sodium citrate method of blood transfusion and gave some interesting statistics concerning results. He deduces from his cases that blood transfusion

is of great value in loss of blood from hemorrhage, and in hemophiliac conditions, but of no particular value in the treatment of sepsis or of pernicious anemia. The effects of transfusion in pernicious anemia are beneficial for a short time only, but not sufficiently so as a rule to give any great promise of help to the patient.

Dr. Kenneth Bulkley gave a series of interesting fracture demonstrations at Bellevue Hospital. He makes use of the methods devised for fracture treatment by Dr. Joseph A. Blake, who had charge of an extensive fracture service in France. Blake's methods probably represent the most modern treatment of fractures. Bulkley makes extensive use of the Balkan frame, Thomas splint and caliper extension. As he said, there are two definite and distinct systems in this method of treatment—one is suspension and the other is extension. He has found that one pound of weight applied in skeletal traction is the equivalent of at least two pounds weight used in the conventional way of our forefathers. His cases of fracture of the femur are practically all treated with skeletal traction in combination with his modification of the Thomas splint, which insures easy and frequent mobilization of the knee. He makes traction by the use of calipers, Steinman pin or Finochietto's stirrup. Traction is maintained in his cases for quite a long period—in one case for forty-two days. One of the early indications for the discontinuance of traction is local infection. He exhibited one case, a woman who had attempted to get on a moving elevator and who had received multiple fractures of both tibia and femur, who was unable by her low resistance to infection to tolerate any sort of skeletal traction.

Dr. John B. Deaver, in his inimitable manner, gave an entertaining discussion of the subject of the acute abdomen in which he dwelt upon the great importance of a prompt decision and an early operative intervention as a means of saving life. This subject was humorously discussed by Dr. John M. T. Finney, who described some of his mistakes in diagnosis, citing a case of measles that had been taken for some acute abdominal infection, also a case in which an acute appendicitis had been mistaken for beginning scarlet fever.

Dr. Percy discussed the merits of the cautery treatment of carcinoma of the uterus and very forcibly called attention to the great importance of this particular method of treatment which not only seals off all of the lymphatic and blood vessels with which it comes in contact, thus preventing danger of the actual dissemination of cancer cells at the time of operation, but also has the advantage that the heat penetrates for some distance into the tissues and destroys the cancer cells. Dr. Percy has proven to his own satisfaction that cancer cells have very little resistance to heat, much less in fact than the normal tissues have, This treatment is unquestionably of very great value in the treatment of so-called inoperable cases of carcinoma of the cervix uteri as it does away with the toxemia and foul discharge, stops bleeding and greatly prolongs the life of the patient. Many of these cases gain 25 or 30 pounds in weight after this treatment. At the time of such treatment, it is of great importance to ligate the main blood supply of the uterus by tying off both internal iliacs and also the ovarian arteries.

Dr. Burnam spoke of the results obtained by Dr. Kelly and himself in the treatment of carcinoma by the use of radium. They have found the method

to be quite successful in many respects. It brings about relief from pain, decreases the size of the growth, and checks the annoying discharge. Dr. Kelley is fortunate in owning a very large supply of radium and the results in some of his cases have been quite wonderful.

Dr. Whitman gave some interesting orthopedic clinics and as usual laid great stress on his method of putting up the leg in complete abduction in the treatment of fracture of the neck of the femur. Plaster of paris is very well handled in his clinic and it is a pleasure to see the artistic casts that are applied.

Announcements and Communications

Dear Dr. Bloss:

The readers of our Journal, particularly those who are visitants at hospitals where training schools for nurses are conducted, will be interested to know that the West Virginia State Board of Examiners for Registration of Nurses, met in the city of Parkersburg, Saturday, October 25th. This was the first meeting and examination of the new board appointed by Governor Cornwell last May.

The examination opened at 8 o'clock a. m., in the beautiful new High School building, and twenty-four graduate nurses from the various hospitals of the state presented themselves for the test.

The following members of the board were present:

Dr. Charles S. Hoffman of Keyser, Dr. B. S. Preston of Charleston, Dr. Harriett B. Jones of Glendale and Dr. Frank Le Moyne Hupp of Wheeling. Dr. Hupp was elected president of the board.

Because of the hardship imparcd upon the nurses and the heavy expenses with these trips, the board unanimously decided to divide the state into four sections or districts, and the next examination which will be hel d the first of May, will be conducted simultaneously and with the same questions in each of the following cities: Wheeling, Keyser, Charleston and Bluefield, and presided over by a member of the board. A meeting of the entire board to be held later in the month at the place of meeting of the State Medical Association.

The following are the questions given at the last meeting of the Board of Examiners:

1. What are the symptoms of internal or concealed hemorrhage? What is the duty of the nurse when concealed bleeding is suspected?

2. Define shock and give nursing care of shock.

3. Mention five antiseptics, indications for their use and usual strength.

4. What epoch making discoveries in medicine are connected with the following names? Give dates.

William Harvey, Louis Pasteuer, William T. B. Morton, Edward Jenner, Joseph Lister, Alexis Carrel.

5. What is typhoid fever?

(a) What precaution would a nurse observe to prevent herself and others from contracting the disease?

(b) Mention at least six important points in the care of typhoid fever.

(c) Name two important complications.

6. What may the following types of vomiting indicate?

(a) Projectile.

(b) Coffee ground vomitus.

(c) Pure blood.

(d) Fecal vomiting.

(e) Mucous streaked with blood.

7. Define trephining, epitaxis, proctoclysis, epidermo-clysis, venous transfusion.

8. If you had a 7.3 gr. Bi-Clor. Mercury tablet, how would you make a one-thousand solution from it, a two, three, four and five thousand solution from the same tablet?

9. What is a green stick fracture, a simple fracture, a compound fracture, a comminuted fracture?

10. In a rupture of a varicose vein of the leg, where would you place the compress? In what position would you place the patient?

11. What is Cystotomy, Nephrotomy, Cholo-Cystotomy, Gastro-Enterostomy?

12. Describe the heart.

13. Where is the internal saphenous vein, the brachial vein, the axillary vein, the jugular vein, the sub-clavain vein?

14. How many bones in the upper extremity? Name them. How many bones in the face? How many bones in the head? What is the tibia and fibula and which bone is the outer one?

15. Where is the periosteum, pericardium, peritoneum, perineum?

16. Name three classes into which germs are divided according to their shape. Mention four diseases caused by germs, and name the germs causing them.

17. What four conditions are necessary for the growth of germs?

18. Why is milk a dangerous food when improperly handled?

19. What is ectopic gestation? Why dangerous?

20. Describe briefly how you would prepare patient for an intra uterine douche.

21. What is the significence of headache, swelling of extremities and increase of blood pressure in a pregnant woman?

22. In the absence of the physician what would you do in a case of post partem hemmorrhage?

23. What diseases would you avoid prior to an obstetrical engagement?

24. Compare mother's milk and cow's milk.

25. Mention four general rules for feeding the sick.

26. Classify: (a) sugar; (b) butter; (c) milk; (d) eggs.

27. What is understood by the following terms: Incubation, prophylaxis, immunity, diagnosis and prognosis?

28. What organs or anatomical structures are involved in the following diseases: Nephritis, arthritis, lumbago and sciatica?

29. What is the period of incubation and the required time for isolation in the following diseases: Measles, scarlet fever, diphtheria and influenza?

30. Mention the three important things for a patient in the treatment of acute pulmonary tuberculosis. Mention some of the sanitary precautions in tuberculosis.

31. What is meant when we speak of a drug as being a specific? Mention two such drugs and disease in which they are used.

32. Give doses of following drugs: Atropine sulphate, strychinine, Tinct. digitalis, Fowlers solution, magnesium sulphate, aromatis spirits of amonia, mild chloride of mercury, fluid extrac of ergot, syrup of ipecac, paregoric, tr. aconite.

33. How would you treat local poisoning from following drugs, when seen

immediately after accident? Mineral acids, carbolic acid and concentrated lye?

Fraternally yours,
FRANK LE MOYNE HUPP.

ADDITIONAL RULINGS ON REINSTATEMENT.

A series of decisions issued by the Director of the Bureau of War Risk Insurance with the approval of the Secretary of the Treasurer provides more liberal conditions for reinstatement of lapsed or canceled insurance.

The provisions of Treasury Decision No. 47, allowing eighteen months from the date of discharge for reinstatement upon payment of only two months' premiums on the amount of insurance to be reinstated, are retained. That decision is liberalized, however, by a new provision that men out of the service are permitted to reinstate by merely paying the two month's premiums without making a statement as to health at any time within three calendar months following the month of discharge.

After the three months following the date of discharge have elapsed, a statement from the applicant to the effect that he is in as good health as at the date of discharge or at the expiration of the grace period, whichever is the later date, will be required together with a written application for reinstatement and the tender of two month's premiums on the amount of insurance he wishes to reinstate.

In order to give all former service men whose insurance has lapsed or been canceled, a fair chance to reinstate their insurance, including men who have been out of the service eighteen months or more, and who are therefore barred from reinstatement under the former ruling, a special blanket ruling is made which allows all ex-service men to reinstate their insurance before December 31, 1919, provided that each applicant is in as good health as at date of discharge or at expiration of the grace period, whichever is the later date, and so states in his application. Of course it is necessary that he tender the two months' premiums on the amount of insurance he wishes to reinstate.

Service men who reinstated their insurance by payment of all back premiums prior to July 25, 1919, when the decision requiring payment of only two months' premiums went into effect, upon written application to the Bureau may have any premiums paid in excess of two applied toward the payment of future premiums. For example, if after a policy had lapsed for six months, a man reinstated and paid six months' premiums instead of two, he may secure credit for four month's premiums.

The provisions for reinstatement do not protect a man until he actually reinstates. If he waits he may not be in as good health as he was at the time of discharge and consequently may not be able to secure reinstatement.

Don't put off reinstatement. Do it now!

THE CASE OF VIVI-SECTION

By FREDERICK HASKIN

WASHINGTON, D. C., Nov. 24.—Has man the right to perform surgical operations and to experiment with dangerous drugs on the lower animals in order to increase his knowledge of surgery and of medicine?

This question has recently been brought again to the public attention. A bill was introduced into the United

States senate making it unlawful to vivi-sect dogs in the District of Columbia, and the senate Judiciary Committee held hearings upon the bill which brought forth a distinguished gathering of scientists to defend vivisection and a large number of churchmen and other persons to assail it. The question was threshed out with unusual thoroughness.

The English Parliament recently defeated a similar bill, of which one of its opponents said that it was a test case "not for the dog or for the medical profession, but for the intelligence of the House of Commons."

The public has been very largely misled about vivi-section. The average layman has very little idea of its actual use and value. He knows that some influential journals have ridiculed it, and that Mark Twain wrote a book against it. He knows also that doctors generally regard it as an absolute necessity to their science. And that is about all he knows.

The contentions of those who oppose vivi-section are that man has no right to inflict pain on the lower animals; that medical science has not accomplished anything by the practice of vivi-section, and that therefore it is merely a futile infliction of cruelty.

The medical men agree that the unnecessary infliction of cruelty is not justified. They admit that the right of vivi section has been abused. They are in favor of proper legal control of this right. But they maintain that to prevent human suffering by the sacrifice of lower animals is supremely justifiable. In fact, they go further and say that even human lives should be sacrificed in experiment if much greater numbers of human lives can be saved. And this has been done repeatedly. The best known case is that of the conquest of yellow fever, in which several physicians volunteered and lost their lives to prove that yellow fever is conveyed by the mosquito. Men have also risked their lives in the study of trench fever, of influenza, and of pellagra.

Of course, the human sacrifice must be voluntary, while the animal sacrifice in the nature of the case, must be involuntary. But society approves and applauds the sacrifice of a few men to save many. They why, ask the physicians, should it decry the sacrifice of a few dogs to save many men?

As to the value of vivi-section, the doctors assert that nearly all of the advances in medicine and surgery made in the last fifty years have been based directly or indirectly upon experiments with living animals, and many of these experiments were upon dogs.

Before discussing the part the dog plays in medical science, it should be pointed out that the making and testing of all serums and anti-toxins depends upon the use of live animals. Sometimes the animal is not seriously injured, sometimes he dies, sometimes he undergoes considerable suffering. But the production of small pox vaccine, and of diphtheria anti-toxin which saves so many child lives, the inoculation against typhoid fever which made our army in France the first in history not decimated by that disease, the prevention of horrible death from hydrophobia when a person has been bitten by a mad dog, are all dependent upon the use of live animals. To discontinue the use of live animals for these purposes would be to destroy thousands of human lives in a year. These serums and anti-toxins are made in the bodies of animals by the manufacturers and are tested in the bodies of animals at the hygienic labora-

tory of the United States Public Health Service here in Washington. This laboratory uses about fifteen thousand live animals every year. Most of them are mice, rats, guinea pigs, and rabbits, but some of them are dogs. These fifteen thousand live animals which are sacrificed every year save many times that number of human lives. They are your protection against some of the most deadly diseases. They also protect you against fraudulent serums and anti-toxins. The doctors feel that they are just as much justified in killing these animals to save human life, as the farmer is in killing animals and sending them to market to maintain human life.

In some cases the animal must suffer, it is true. But it is a question of whether the animal is to suffer or human beings are to die.

When you want quail on toast, you do not debate whether the quail had as good a right to life as you. When your wife buys a fur piece, she not only deprives a fox of life, but she endorses the infliction of considerable suffering on the trapped fox. Daily we sacrifice animals to our own purposes. We must do so to live. Often we sacrifice them somewhat ruthlessly, causing them to suffer more than is necessary, as when we take animals in traps that do not kill. Animals used for experiment in medical science are allowed to suffer as little as possible.

If your child were bitten by a mad dog, and threatened with the horrible death which hydrophobia causes, you would not hesitate to send him to a Pasteur institute for treatment. The Pasteur treatment would save his life and it is the only thing that could possible save his life.

Many animals were sacrificed to perfect the Pasteur treatment, and many animals were sacrificed to make the materials for the treatment. Yet you would never debate the question whether these animals had as good a right to life as your child. Thus argue the doctors.

They also bring an impressive array of evidence against the contention and that vivi-section has accomplished nothing. They specially value the right to vivi-sect dogs because the dog lives under much the same conditions of food and shelter as does man. Modern intestinal surgery is based largely upon experiments with dogs. So is knowledge of the heart and of the circulatory system. A doctor would not venture to suture a stab wound in the heart but for the experiments that have been made on dogs. Defense against poisonous gases during the war was dependant on dogs. Goats were tried, but it was found that a goat would not even stop grazing because of a poisonous gas. Dogs were affected by it like men, and the defensive mechanisms and treatments were perfected by experiments with dogs. Cerebral surgery, including the treatment of brain tumors and of brain injuries, was developed by experiments on dogs. The transplatation of vital organs was perfected in the same way.

Chinopodium is the only thing that cures the deadly disease of hookworm. It varies unaccountably in its composition and effect. Each fresh lot which is used by the doctors must be tested on a dog first. In some cases it kills the dog. If this experiment were not allowed, it would have to be tested on a man and in some cases it would kill the man.

Clipped from daily newspaper sent to the Editor.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., December, 1919.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription . . . . . $1.50 per year
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—Robert J. Reed, Wheeling, W. Va.

FIRST VICE-PRESIDENT—J. Frank Fox, Bluefield, W. Va.

SECOND VICE-PRESIDENT—S. M. Mason (deceased), Clarksburg, W. Va.

THIRD VICE-PRESIDENT—C. M. Hawes, Huntington, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A. FOR 1918-1919—F. LeMoyne Hupp, Wheeling, W. Va.; Alternate—Henri P. Linz, Wheeling, W. Va.

DELEGATES TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg, W. Va.; Alternate—W. W. Golden, Elkins, W. Va.

COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; H. P. Linz, Wheeling, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; L. H. Forman, Buckhannon, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; J. E. Rader, Huntington, W. Va., two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, W. Va., one-year term; E. H. Thompson, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—H. L. Goodman, Charleston, W. Va., one-year term; Charles O'Grady, Charleston, W. Va., two-year term.

RICHARD E. VENNING

It is with feelings of profound personal sadness that we announce to our fellow members the passing on of our former President.

For some thirteen or fourteen years one of the most pleasant anticipations of the approaching meetings of the State Association was that we should meet Venning again. He was always one of "the regulars"; came early and remained until the finals whether the banquet was the evening of the last day or not.

No member was more interested in the scientific work of the meetings nor more ably enterd into the discussions and surely none had a greater interest in the welfare of our profession and all things for its advancement.

A man of fine mind, loyal to the highest ideals of a physician and a courtly gentleman in all that this term means. We shall miss him greatly.

For sometime Dr. Veming's health had been failing. Some months ago he had given up the practice of his profession and purchased a farm near Charlottesville, Virginia. Some two days before his death he had returned to

Charles Town on business. The end came very suddenly during the night of October 31st.

He was but fifty-one years of age, was a native of Charleston, S. C., and a graduate of the medical department of the University of Pennsylvania. For twenty-five years he practiced in Charles Town where he established a hospital and enjoyed a lucrative practice until failing health compelled him to retire.

In 1913, he was President of the State Medical Association.

Dr. Veming is survived by his wife, two sons and two daughters, his father and two sisters. To them we extend our heart felt sympathy in this time of sadness.

———o———

VIVI-SECTION

It seems to us to be incredible that in this day we should have any question raised in regard to animal experimentation, yet recently a bill was introduced into the United States Senate making it unlawful to vivi-sect dogs in the District of Columbia.

We find ourselves assailed for this experimentation, which is so very necessary to the advancement of both medicine and surgery. Sometimes we may be just a little enbarrassed by the charges which may be made as to cruelty etcetera.

The hearings before the Senate Judiciary Committee made such an impression upon one layman that it was made the subject of a syndicated daily letter to the newspapers.

This letter so appealed to one of our members that it was clipped and mailed to the Editor. Few arguments advanced in behalf of vivi-section are so clearly presented and timely, and for that reason this clipping from a daily paper is reprinted in another part of this paper.

———o———

PHYSICIANS AND STATISTICS

While there have always been those who have cast discredit on the scientific value of statistics, it remains a fact that some medical knowledge must be derived from statistical investigation. Statistics may, of course, be juggled, and it is also fair to assume that statistics are often prepared by persons not skilled in the fundamental principles underlying their preparation. It is probably true that the bulk of medical statistics of the past has been prepared by medical men not trained as expert statisticians.

Recently Mr. Raymond Pearl[1], professor of biometry and vital statistics in the Johns Hopkins School of Public Health, has analyzed, from the point of view of a trained statistician, certain figures in a paper published by Head[2] concerning the efficiency of various methods of treatment in pneumonia. In this paper Dr. Head himself suggested that the lowered mortality shown in favor of closed ward treatment might be merely a coincidence. In his analysis of the figures, Pearl shows that while Head's conclusions are qualitatively correct, they are quantitatively out of the way on account of the neglect to take into account the factor of random sampling. Another neglected factor, frequently overlooked by medical writers, is the natural history of the disease under investigation. It has been asserted by numerous observers that the mortality from influenzal pneumonia at the end of an epidemic is usually much lower than it is at the beginning of the outbreak. Pearl shows that this is the case,

and that Head, although recognizing the possibility, did not take it into account in evaluating his figures.

If the statistical method, first extensively introduced into clinical medicine by Louis and the French school, is of value, it goes without saying that the statistics which are used must be based on the well-recognized principles utilized by professional statisticians. So far as mortality statistics are concerned, it may be assumed that the correct methods are usually employed; but it is certain that this is not the case when ordinary clinical statistics are concerned. In any textbook on medicine or surgery, one may find numerous statements covering statistically such matters as the age at which certain diseases occur, the relative proportion of the sexes involved, the frequency of complications, and the relative frequency of different diseases in a given organ or system. It is quite certain from the figures presented that these statistics would be regarded as valueless by a professional statistician, and that while they are perhaps not valueless to the clinician, they are not nearly as valuable or as correct as properly prepared statistics would be. In differential diagnosis, as Southard has pointed out, it is desirable that the physician should know the possibilities. In 10,000 patients with convulsions, what proportion is likely to be due to epilepsy; what proportion to uremia; what proportion to general paresis, etc.? With correct knowledge on such a point, the physician knows when he encounters a case of convulsions that there are certain chances in favor of a given disease, and he can make what Southard calls a diagnosis by orderly exclusion, which is more satisfactory than the old-fashioned diagnosis by exclusion in which the probabilities were ignored. In the matter of treatment, too, the application of correct statistical principles would prevent the flooding of medical periodicals with the views of therapeutic optimists based on uncontrolled observations. The checking of medical statistics by trained statisticians will doubtless served as a stimulus to more accurate statistical methods.—*Ed. Jour. A. M. A., Nov.* VE, VTVT..

---

1. Pearl, Raymond: A Statistical Discussion of the Relative Efficacy of Different Methods of Treating Pneumonia, Arch. Int. Med. 24:398 (Oct). 1919.

2. Head, G. D., The Treatment of Pneumonia, J. A. M. A. 72:1268 (May 3) 1919.

State News

Dr. Henry C. Eyman, President of the American Medico-Psychological Association, was a distinguished visitor at the Huntington State Hospital for a week during the latter part of November.

Dr. Eyman is one of the most prominent alienists in the United States and was superintendent of the State Hospitals at Cleveland and Massillon, Ohio, and prominently connected with other State hospitals in Ohio for a period of thirty-five years.

Dr. Eyman is a cultured, versatile gentleman and enjoys a deserving popularity among the 912 members of his Association, and we hope that we will have the pleasure and honor of having him in West Virginia again at some future date.

Dr. J. C. Rogers, formerly located at Cairo, is now practicing his profession at Parkersburg.

Dr. G. T. W. Hall, who has been located at Freemansburg, La., moved to Weston.

MARRIED

Dr. Frank Laid Wysor and Miss Jennie Goodwin Snead, both of Clifton Forge, Va. Dr. Wysor has recently returned from service overseas in the medical corps of the army. They will make their home in Raleigh County, W. Va.

Dr. Robert U. Drinkard, a native of Campbell County, Virginia, but who has made his home in Wheeling, W. Va., for the past nine years, has been made a fellow of the American College of Surgeons. Dr. Drinkard was a graduate of Johns Hoskins Medical School in the class of '09.

Dr. and Mrs. Smallridge, of Montgomery, were recent visitors in Huntington.

Dr. S. L. Jepson, Dr. F. F. Farnsworth and Engineer Mr. E. S. Tisdale of the State Health Department, attended the recent meeting of the American Public Association at New Orleans. Dr. Jepson was elected Vice-President of the Association for the coming year. The next meeting will be held in San Francisco.

Members of the Cabell County Medical society and a number of physicians from nearby cities were entertained at a banquet given by Dr. I. C. Hicks at his home on Fifth avenue, which had been beautifully decorated for the occasion. The list of guests included the following: Doctors J. T. Baker, Banfield, James R. Bloss, R. M. Bobbitt, E. S. Buffington, H. C. Brandebury, C. M. Buckner, S. A. Draper, C. R. Ensloy, F. A. Fitch, J. C. Geiger, E. B. Gerlach, J. A. Guthrie, L. V. Guthrie, R. E. Hardwick, H. D. Hatfield, C. M. Hawes, A. F. Haynes, W. D. Hereford, C. C. Hogg, C. L. Hopkins, B. L. Hume, Humphreys, J. Ross Hunter, Jameson, J. R. Kasee, Kent, J. C. Kessler, A. K. Kessler, I. R. LeSage, J. M. Lovett, F. O. Marple, Morrison, W. C. McGuire, W. E. Neal, J. I. Miller, R. H. Pepper, Karl Prichard, A. J. Pickering, J. E. Rader, C. O. Reynolds, A. J. Rowsey, Shaffer, P. H. Swann, John Steenbergen, George Summers, W. W. Strange, C. T. Taylor, Lindsey Vinson, W. E. Vest, G. N. Waldeck, R. W. Warnock, E. D. Wells, A. J. Watts, R. J. Wilkinson, Williams, J. F. Withers, Guy Yost, C. H. Malcolm, J. C. and C. P. Ford, Hodges, Robinson, Groom, Mayberry, T. W. Moore, J. C. Mathews, Scott, J. Boyce Taylor, of this city; C. E. Ray, George McQueen, Cannady, of Charleston; C. F. Hicks, of Welch; Robinson, of Hurricane; Morrison, of Milton; H. H. Biedler, J. A. Cole and W. L. Swain, of Baltimore, Md.

Dr. G. H. Barkdale has returned after two years' service in the army and has opened offices in Charleston. He has recently taken a special course in neurology at the New York Neurological Institute, and has done medical work at the Post Graduate Hospital.

Dr. M. V. Godbey, of Charleston, has returned from a visit to New York City, where he has been attending surgical clinics.

Dr. H. L. Robertson, of Charleston, has recently returned from an extended experience in the Canadian army and has opened officers in the Morrison building.

Dr. C. E. Copeland has returned to Charleston after an absence of several months' duration.

Dr. L. V. Guthrie of Huntington, has recently been appointed by the Federal Public Health Service as Acting Assistant Surgeon and Consulting Phychiatrist. Claimants for War Risk Insurance in West Virginia, suffering with nervous and mental disorders will be sent to him for examination.

Dr. E. M. Easley has changed his location from Alpoca to Rushmere.

Dr. G. E. Gwinn is located at Sheltering Arms Hospital, Hansford, doing internal medicine.

DR. R. E. VENNING DEAD

West Virginia Surgeon Was Visiting at Former Home.

Charles Town, W. Va., Nov. 1.—Dr. Richard E. Venning died suddenly last night at the home of William O. Norris. He had recently given up his practice here and had gone a few weeks ago to a farm he had purchased near Charlottesville, Va., and returned a day or two ago for a visit. He was a graduate of the University of Pennsylvania Medical College, Philadelphia, and was at one time connected with the Woman's Hospital, Baltimore, before his coming here 25 years ago.

He was a native of Charleston, S. C., and was 51 years old. Surviving are his widow, who was a Miss Worthington, of Worthington Valley, Baltimore county, Md.; two sone and two daughters, his father and two sisters, who reside in Charleston. Dr. Venning started the Charles Town Infirmary here about 15 years ago, and several years ago turned it over to the hospital board, which is composed of Jefferson county physicians. A few years ago he was president of the State Medical Society.

Dr. W. N. Haynes has moved from Boomer to Victor, West Va.

The satff of the Chesapeake and Ohio Railway Hospital at Huntington consisting of Drs. R. J. Wilkinson, W. E. Vest, J. Boyce Taylor, J. M. Emmett, L. T. Vinson, E. D. Wells, J. Ross Hunter, J. H. Steenbergen, C. R. Enslow, and Jas. R. Bloss entertained the Cabell County Medical Society November 18th.

The meeting was held in the sun corridors of the hospital and after the scientific program had been conmpleted dinner was served to some seventy members of the society.

"Keeping Fit", is the latest slogan for the newest campaign in West Virginia, according to a notice just sent by F. F. Farnsworth, of the U. S. Public Health Service. Dr. Farnsworth announces a conference will be held in Charleston December 4 and 5 and Huntington civic societies are asked to send representatives. The West Virginia conference is part of a nation-wide movement. The purpose of the conference is, according to Dr. Farnesworth, as follows:

1st.—To enlist the active interest and cooperation of available ageneies interested or who may become interested in reaching the boys of the state with a "Keeping Fit" message.

2nd.—To plan the "Keeping Fit" campaign for the state.

Slides and exhibits will be provided by the U. S. public health service for use at the conference. There will also be addresses by men of national and state prominence.

The following organizations are requested to send representatives to this conference:

Y. M. C. A.; Boy Scouts; Boys' Club Federation; Federal Council of Churches; State Sunday School Association; Sunday School Council of Evangelistic Denominations; Catholic church and affiliated bodies; Jewish and Y. M. C. A.; Red Cross; Chambers of Commerce; Rotary Clubs; Kiwanis Clubs; State Board of Education; State Women's Clubs Federation.

---

266 AMERICAN NURSES DIED IN THE WAR

Of 10,245 members of the army nurse corps who saw service overseas, 266 died and three were wounded in action, according to a report on the work of the nurses on the western front made by the director of the army overseas nursing service.

In recognition of her service during the war, Miss Dora E. Thompson, superintendent of the Army Nurse Corps has received the Distinguished Service Medal from the hands of Secretary of War Baker. She has been superintendent of the Army Nurse Corps since 1914, is an enrolled Red Cross nurse, a member of the National Committee on Red Cross Nursing Service, and has been chief nurse at the Presidio and in the Philippines.

Miss Thompson is now taking a rest, and her place is being taken by Miss Julia Stimson, acting superintendent and dean of the Army Nurse School. Miss Stimson was formerly chief nurse of the American Red Cross at Paris and chief nurse of the A. E. F.

Dr. Allan McLane Hamilton, of New York, widely known alienist and specialist on nervous diseases, died suddenly November 23, at Great Barrington, Mass. Mr. Hamilton was born at Brooklyn in 1848. He was a grandson of Alexander Hamilton.

He testified for the goverment as an expert in the trial of Gitcau, assassin of President Garfield.

Dr. Alexis Carrel was scheduled to leave France the first week in November, to resume his work with the Rockefeller Institute, in New York City. He has completed four years' service with the French army hospitals.

The medical department of Armour and Company has taken precautions among employes against a return of the "flu" epidemic in Chicago and other cities where the Armour plants are located.

All employes have been notified that without charge they may have the influenza vaccine administered according to the formula of Dr. E. C. Rosenow.

In addition to offering this vaccine free to employes, a general educational campaign along health lines and particularly with reference to the "flu" is being carried on among the workers in the plant.

Dr. Volney S. Cheney, medical director of Armour and Company, reports that the employes are taking an interest in the campaign and that as a result no serious recurrence of influenza is looked for among Armour workers.

Society Proceedings

Huntington, W. Va.,
November, 25th, 1919.

Dr. J. R. Bloss,
Dear Doctor:

I am sending you the report of the last meeting of the Cabell County Medical Society as follows:

The Cabell County Medical Society met at the C. & O. Hospital, Dr. Hawes presiding. The minutes of the last meeting were read and approved.

The applications of Drs. J. M. Emmett, C. G. Willis, and W. W. Strange for membership in the society were read by the secretary, and having been approved by the Board of Censors, they were unanimously elected to membership.

Drs. A. J. Sweezy and J. W. Mayberry presented cards of transfer and on motion were admitted to membership.

Dr. J. M. Emmett read a very interesting paper on Brain Surgery, which was well received and discussed. The doctor gave several case reports and exhibited cases before the society.

Dr. W. E. Vest then reported a case of Angioneurotic Oedema which brought an interesting discussion.

It was then moved and carried that we adjourn into a social session and the C. & O. Hospital Association and staff served a beautiful and well appointed dinner.

On motion of Dr. T. W. Moore a standing vote of thanks was extended to the Hospital Association and staff and the ladies for their excellent entertainment, and everybody present pronounced the meeting and entertainment a very enjoyable affair.

Yours fraternally,
R. H. PEPPER,
Sec. Cabell County Med. Soc.

November 5, 1919.

The Editor of the West Va. Medical Journal,
Huntington, West Virginia.

Dear Doctor:

The Fayette County Medical Society held its regular monthly meeting at the residence of Dr. E. S. Hamilton, at Oak Hill, W. Va., on November 11, 1919. The meeting was called to order by the President, D. E. J. Grose, with the following members present:

Drs. Davis, Jones, Price, Eltinge, Bruce, Duncan, Hoskins, Hamilton, Hopkins, Hunter, Smith, VanPelt, Adair, Polidoff, Goodman and Grose.

Dr. E. S. Hamilton read a paper on Acute Nephritis and was discussed by Drs. Jones and Davis, and enjoyed by all that were present.

Dr. Eltinge, gave a very interesting talk on his experience in the Army Medical Corp.

Dr. W. E. Smith read a very interesting paper on the Shick, reaction, which was discussed by Drs. Hunter and Davis.

The secretary presented the names of Drs. L. S. Henley and N. Polidoff for membership, and on motion of Dr. Davis seconded by Dr. Jones the by-laws were suspended and the above named doctors were elected to membership for 1920.

Dr. Jones asked the Chair for a discussion by the society of the question of an increase of fees, especially Obstetrical fees, stating that he had raised his fees for this class of work, and thought that there should be some concerted action by the members of the society to get better paid for Obstetrical work. Dr. Eltinge made a motion, seconded by Dr. Smith that the President appoint a committee of three members to report at the next meeting, recommendation as to uniform fees in the county, same being car-

ried, the President appointed the following: Dr. S. W. Price, Scarboro; Dr. Geo. W. Grissinger, Carbondale, W. Va.; Dr. J. W. Hopkins, Fayetteville, W. Va. There being no further business on motion of Dr. Jones, seconded by Dr. Hopkins, the society adjourned, after extending thanks and appreciations to the Host and Hostess.

Yours very truly,
H. L. GOODMAN, *Secretary.*

Medicine

ANTIPNEUMOCOCCUS SERUM IN INFLUENZA PNEUMONIA

Polyvalent antipneumococcic serum was administered at Camp Greene in 158 cases of pneumonia, the cases being selected according to two principles. In all Type I cases the patients received serum unless from their condition when type determination was heard from it was judged that the patient could be expected to recover without serum. In certain severe cases where there was danger of an unfavorable outcome, Brown and Palfrey considered themselves justified in giving the patients the benefit of the possibility of improvement by serum treatment without waiting for type determination. Of the pure Type I cases, there were 113, and twelve men died, a mortality of 10.6 per cent. Of the total cases where pneumococcus Type I was present either alone or associated with another type, there were 133 cases and thirteen deaths, a mortality of 9.7 per cent. Serum was given in doses of from 100 to 150 c.c., intravenously, repeating at eight, twelve and sometimes twenty-four hour intervals, according to response on the part of the patient. In certain cases one dose seemed to be sufficient to turn the tide toward recovery; other cases required one or more repetitions. The largest amount given in any single case was 600 c.c., however, the average amount given was 300 c. c. The possibility is at least suggested that the non-specific foreign protein reaction may serve to some extent to stimulate reaction against infection.—Jour. A. M. A., 9-6-19.

SECOND ATTACK OF POLIOMYELITIS, AFTER INTERVAL OF FIFTEEN YEARS.

Francis D. Francis and W. F. Moncreiff, Journal of Nervous and Mental Disease, April, 1919), report an interesting exception to the semi-incidence of acute anterior poliomyelitis. The patient was an eighteen year old girl who at the age of three had suffered from a typical attack of poliomyelitis with paralysis of the arms and legs. After several months function had been restored to the left arm completely, but to the right arm only partially, leaving a well marked residual paralysis of certain muscles. The present attack had begun insidiously and eight days after the onset a sudden paralysis of the legs appeared, complete in the left, partial in the right. Improvement was very slow, and six months later, after constant treatment, only fifteen to twenty per cent of the lost function had been restored. The cases in the literature are quoted, twenty-three in all, and it is remarked that they seem to fall into two fairly well defined groups, one where the two attacks are separated by a short interval and the other by a long interval. The authors think that in the former case an autoinfection is the most probable explanation, and in the latter a reinfection from a new external source. As to the failure of immunity, theorizing only is possible. Perhaps

there has been a complete lack of information of immune bodies, or perhaps the immunity was quantitatively or qualitatively insufficient.

AMENDMENTS OFFERED TO WAR RISK INSURANCE ACT.

Under date of August 26, a bill was introduced by Mr. Sweet in the House of Representatives, to amend and modify the War Risk Insurance Act. The amendment provides for the appointment of a director of the Bureau of War Risk Insurance, to conduct the bureau. It defines "active service"; increases the amount of compensation for disability; enlarges the class of beneficiaries so as to include in addition to those already included, uncles, aunts, nephews, nieces, brother-in-law and sister-in-law, of the insured. Another section provides that the bureau may make provision in the contract for converted insurance for optional settlements to be selected by the insured, whereby the insurance may be payable either in one sum or instalments of thirty-six months or more. The bill bears the endorsement of the Secretary of the Treasury, who urges that all of the amendments shall be made at the earliest possible moment. In the report of the committee favorably referring the bill back to the House, is an interesting table as to what constitutes disability, with percentage. For example, epilepsy with fits occurring daily is 100 per cent disability; fits occurring periodically at intervals of two to four days is 80 per cent; from eleven to thirty days is 40 per cent, and at intervals exceeding thirty days, 20 per cent. The entire human body is thus classified as to percentage of disability of various parts.

EPIDEMIC SORE THROAT

J. J. Keegan, Chelsea, Mass. (Journal A. M. A., May 19, 1919), describes an epidemic of streptococcic sore throat, prevailing during the month of February, 1919, at the U. S. Naval Hospital, Chelsea, Mass., and which was comparable to the epidemics previously reported in Boston, Chicago and Baltimore in 1911-1912. Attention was first called to it by the numerous instances of postoperative rise in temperature in surgical cases, with sore throat and a subsequent infection of clean surgical wounds with a peculiar hemolytic streptococcus in almost pure culture. The symptoms at the onset of the sore throat were characteristic of acute bacterial anaphylaxis—sudden chilliness, dizziness, fever, headache, backache, general aching and prostration, with occasionally an initial leukopenia. The secondary symptoms localized in the tonsils or lateral pharynx with complications referable to the submaxillary and deep cervical lymph glands, the nasal sinuses, the middle ear and mastoid and the face, and metastasis to the surgical wounds and the joints. In no case was there a complicating bronchitis or broncho-pneumonia, and in this stage there was a constant mild leukocytosis.. The micro-organism constantly recovered from the throat and infected wounds was a hemolytic streptococcus, growing in large moist droplet-like colonies on blood agar medium. The epidemic originated in the nose and throat surgical wards, and spread by contact to others. There was no possibility of milk infection in this epidemic. Control was effected by suspension of all surgical operations for a period of three weeks, immediate isolation of all acute throat cases, and elimination from the surgical

service of all carriers of hemolytic streptococci. The infection was evidently extensively spread outside of the hospital, many new cases having been admitted from outside stations.

MASTURBATION JUDGED FROM A NEW STANDPOINT

With our usual editorial eye for the good things in current literature we have discovered a bit of information that has tickled our midriff and put us in a very pleasant frame of mind. In O. A. Wall's "Sex and Sex Worship" (Phallic Worship) we note a chapter on masturbation which for originality is without equal in medical literature. Dr. Wall is apparently unafraid to express opinions on masturbation which are opposite to the usual teachings in medical works of the best quality, for he states that the evil results which follow the practice have been greatly exaggerated, especially by the quacks, who, in their eagerness to rake in the dollars, have sent out literature to the unwary depicting the frightful mental and physical upsets which invariably are part and parcel of self-abuse. To counteract the nefarious literature of the quacks and to offer to a section of the public that has been quilty of masturbation some solace whereby they will not think they have been guilty of an irreparable crime against themselves, Dr. Wall asserts that in the majority of cases the disastrous results are mere legends—fairy tales for the gullible. And, assuming this premise, he advances boldly and fearlessly, the gist of his contention being, that since in his opinion self-abuse is not so evil a practice as quacks and even regular doctors of enviable intelligence have made it out to be, why not advocate it in preference to assuming a tolerant attitude toward sexual intercourse with prostitutes or those near-prostitutes who walk our streets in the guise of perfect ladies? By bringing to the attention of the medical profession and especially to those who are in the habit of consorting with women of loose morals, the fact that self-abuse is not the "crime" it has been pictured, the problem of how to avoid social diseases will be solved. In short, of the two evils, Dr. Wall decidedly advocates self-abuse; and so deeply interested is he in the abolition of the social diseases which at present are a menace to the health of the nation, that he fain would bring the good news from the Atlantic to the Pacific, thus conferring on mankind a boon that has never been conferred before.—Exchange, 9-19.

IS COFFEE AN ANAPHRODISIAC?

The preservation of the virility of the sexual organs has always been of paramount importance to man and great is his distress when he realizes that his sexual power is waning or has completely left him. At this critical time in his life he beseeches his physician to help him, and when the help is not forthcoming after he has persistently followed the lukewarm advice of the medical man who looks upon the matter in a calm, cool sort of way, being somewhat of a philosopher inured to the retributive acts of Nature, he falls into the hands of the unscrupulous, who belabor him with all sorts of preparations and fight the dark and tortuous ways of Nature as only ignorance is capable of doing. This happens many times each day in every community known to man; and the mental distress on the part of this type of patient is often a subject for ridicule by those who still enjoy their

virility and who never give a thought to what might happen to them on account of indiscretions which Nature in her stern way never forgets to overlook. But every now and then a new light is thrown on the subject—a new light that makes for simplicity and is so alluring on account of its simplicity that he who would not take note of its illuminating qualities must be pronounced at once a boor.

According to Prof. Gouget of Paris, coffee is so powerful an anaphrodisiac that the matter of drinking this much-desired beverage should be discouraged if we want to save mankind from the mental distress mentioned above; and to substantiate his statement he marshals forth from the dark recesses of history a number of ginks who lost their sexual power through indulgence in coffee-drinking. This contention, as applicable to kings, carries small weight with us today, for we are making the world safe for democracy and not for kings who are in the habit of amusing themselves in the licentious ways so graphically depicted in Victor Hugo's "*Le Roi S'Amuse.*" But Prof. Gougot does not stop at kings and their destruction of sexual virility; he is democratic enough to include the common people, and cites a number of instances where loss of sexual power could unmistakably be tracted to the drinking of coffee—the loss ranging from frigidity to atrophied testicles.

Similar to all investigators, his enthusiasm carries him too far, for he makes a statement, the truth of which is not borne out by investigators "on their native heath"—namely, that for a long time the Orientals have known of the anaphrodisiac quality of coffee. In the series of books entitled "*Ensyclopedie de l'Amour*"* edited by Marius Boisson —some twenty volumes—there are chapters on the manner in which sexual intercourse, is carried on in Morocco, in Hindustan, in Arabia and in other oriental countries. The act is prolonged as is never attempted among the Occidentals in a manner that should arrest the attention of those amongst us who pride themselves on their sexual virility. Intercourse is interrupted by drinking the strongest coffee every now and then, this beverage being taken as a tonic and as a refreshment during the sexual act so that full enjoyment may be had from a prolongation that is considered necessary. During the intervals when cups of coffee as consumed, the male organ is never removed but remains *in situ;* and after the refreshing libation the act is resumed. Some four or five cups of coffee are taken at intervals, and the prolongation must be the envy of all Occidentals, for at times the act lasts longer than half an hour. This is the custom of all oriental countries, according to the series of books we have mentioned; hence the conclusion on our part must be that coffee is not the powerful anaphrodisiac Prof. Gouget makes it out to be, otherwise the Orientals would not continue to drink it during sexual intercourse and thus ruin their chances to achieve the end which they desire—to prolong the act as it is never attempted by us and thus declare themselves virile from an oriental standpoint.—Exchange

---

THE PREVENTION OF PNEUMONIA BY INOCULATION

An able clinician and investigator whose interest has centered chiefly on the pneumonia problem remarked recently that "the more cases of pneumonia he treated the less treatment they got." It was a healthy confession of our present limitation in thesapeusis which

only adds emphasis to the value of the preventive measures that have been developed during recent years. To this advance American medicine has contributed its full share.

Following the promising but inexact experiments of Wright in South Africa, it will be recalled that Lister carried out prophylactic immunization in a large number of Rand mine workers, using a composite vaccine made from pneumococcus types prevalent in that region. Lister at first tried intravenous injections; later, however, he found that subcutaneous injections were sufficient to establish an immunity against infection. This protection was almost 100 per cent efficient against the particular types of pneumococci used in the vaccine, thereby justifying the belief that prevention of pneumonia by vaccines was a feasible procedure. We now have available for study the results of two similar series of prophylactic inoculations made at Camp Upton by Cecil and Austin and at Camp Wheeler by Cecil and Vaughan which seem to confirm the work of Lister.

At Camp Upton, Cecil and Austin used a saline pneumococcus vaccine containing Types I, II and III. Of this vaccine three or four doses were given at weekly intervals. The first dose contained three billion organisms, the final doses from six to seven and one-half billion. Some twelve thousand seasoned troops were inoculated, which number represented approximately 40 per cent of the strength of the entire command. Wrile the period of observation after the inoculation was unfortunately a brief one (ten weeks), definite evidence of protection was made apparent by the fact that no cases of pneumonia of Types I, II and II occurred in the vaccinated groups , While twenty-six cases due to these types of infection originated in the unvaccinated groups. Only seventeen cases of pneumonia of all types (including Type IV and the streptococcic) developed among the vaccinated men.

At Camp Wheeler Cecil and Vaughan found it possible to immunize virtually 80 per cent of the total command, but the conditions differed materially from those at Camp Upton in several respects: first, that a large number of the troops were recruits and consequently more susceptible to the disease (the difference in the susceptibility to pneumenia between seasoned troops and recruits has been recently discussed by Opie and his associates'; second, that the work was complicated by the influenza epidemic, and third, that a lipovaccine was substituted for the saline vaccine previously used. This vaccine, as described by Fennel, contained the three types of pneumococci in a dosage of ten billion organisms per cubic centimeter and only one injection was required for complete immuization.

The study had to be discontinued when demobilization was begun, but it covered a period of approximately three months. During this time 363 cases of pneumonia of all varieties occurred among the vaccinated men (80 per cent of the total command) and 327 cases among the unvaccinated (20 per cent of the command); almost as many, therefore, among the unvaccinated one-fifth as among the vaccinated four fifths. Excluding cases that developed within one week after the inoculation, namely, before protection of any kind could be expected to have developed, only eight cases of Type I, II and III pneumonia developed among the vaccinated men. These were all secondary to severe cases of influenza.

When the incidence of the pneumonia among recruits, on the one hand, is studied, it is found that per thousand men the incidence was twice as great for the unvaccinated as compared with the vaccinated recruit. In the seasoned troops, on the other hand, the difference was even greater, for there were almost seven times as many cases among the unvaccinated as among the vaccinated men, an observation that leads Cecil Vaughan to the belief that the proper time to vaccinate recruits is two or three weeks before they are inducted into service in the camps. As a result of their work they have reached the conclusion that even in civil life, where pneumonia outranks other infectious diseases in the mortality list, inoculation, against pneumonia will find a large field of usefullness, especially when relatively nontoxic vaccines such as lipovaccines are available. Their observation, too, that absolutely no evidence exists that such prophylactic vaccination is followed, even temporarily, by a so-called "negative phase" or period of lowered resistance to the disease against which protection is sought is also reassuring.—*Ed. Jour. A. M. A.* 5-24-19.

BODILY RESISTANCE

O. J. Walker, Camp Sherman, Chillicothe, Ohio, (*Journal A. M. A.*, May 1, 1919), gives his results from the study and use of the blood count as an index of bodily resistance in acute inflammatory processes. He says we still find many who do not correctly understand the significance of blood pictures in given conditions. In many hospitals the total leukocyte count, only, is made, though among experts the differential count is most valuable, especially the relation of the total leukocytes and the polymorphonuclear percentage. He quotes Sondern's early article in which he concluded that leukocytosis was largely dependent on bodily resistance toward infection, and that its degree can be a guide to the intensity of the pathologic process. Sondern divided blood findings into three types, according to the relative percentages of polymorphonuclear cells and the bodily resistance their ratio indicated. Gibson's "standard chart" from a study of many blood pictures, and Wilson's modification of the same are also noticed, as showing the views of surgeons in regard to the blood count significance. He considers their work as deserving more general utilization. Possibly the fact that it has not been so generally known or perhaps the inconvenience of the requirement of a standard chart has caused its neglect. Walker gives the results of a study of 105 cases of various diseases, and the interpretation of the condition observed. Each day the clinical condition, temperature, pulse and respiration were checked up with the blood count. In all, 1,710 total leukocyte counts and an equal number of differential counts were made. The results of the study in pneumonia, influenza and measles, and in empyema are reported, and he sums up his conclusions from the whole in the following: "When used alone, neither the total leukocyte nor the differential count give a true idea of the degree of an infection or the condition of the patient. Sondern's hypothesis that the proportional relation of the total leukocytes and the polymorphonuclear percentage is an index to body resistance seems to be true. A ready and tangible method of determining the degree of resistance from the leukocptic examination, that is, total leukocyte and polymorphonuclear percentage, is fforded

by the index of resistance, which expresses essentially the same thing as Gibson's 'resistance line,' but is a more accessible means of interpreting a blood picture than the 'standard chart' The index of resistance has the same value in acute surgical conditions as Gibson's 'resistance line.' The blood index is as sensitive an indication of change in the condition of an acute inflammatory process as the temperature curve and other clinical signs. In some instances it has seemed to be more delicate than any other sign. In acute infections diseases such as pneumonia, influenza and measles, the leukocyte index is of value chiefly as a danger signal of the onset of septic complications. The lower and more persistent the index, the more certain is the sign and the more serious is the condition."

EUTHANASIA

The question as to whether physicians should have the power to terminate painlessly lives which have become a burden from incurable disease has been debated from time to time. It has arisen once more. An inquest was held in London on a man who stabbed himself in the heart. He had said that it was a pity physicians could not put patients like himself suffering from an incurable disease out of their misery. The coroner, Mr. Ingleby Oddie, remarked that we had not yet come to the stage of civilization which allowed this course, but he had no doubt that the time would come when painless enthanasia would be permitted in such cases. A verdict of "suicide while of unsound mind" was returned. Some days later an inquest was held on a man who suffered from consumption and shot himself through the heart. He had been very depressed because he was incurable and had read and called attention to an article in the daily *Mail* on the previous inquest, which was entitled, "Doctors' Right to Kill." A discussion of the question followed in the press.

The medical profession showed itself almost unanimous in opposing the coroner's suggestion. A well-known physician and member of Parliament, Lieutenant-Colonel Raw, said that no physician would accept such a responsibility, for medical science was not an exact science. New discoveries were constantly being made, an a patient that was regarded as incurable today might be cured tomorrow. It was a physician's whole business to prolong life to the last, and to save the sufferer, as far as possible, from physical and mental pain. Once an alteration was made in that conception of a physician's duty, the whole public confidence in the medical profession would go. Again, to illustrate the impossibility of the proposal, suppose it was admitted that incurables might be killed, when would they be killed? A man with a disease might be as incurable in the early stages as he was in the later. He might be able to live for several years. Was he to be killed at first, or in the terminal stages of the disease? Lieutenant-Colonel Raw said that he had known many a case of men who were condemned to death by leading specialists and who had completely recovered. He considered that the proposal was utterly impossible. Capt. W. E. Elliot, another physician and member of Parliament, was equally emphatic. He instanced the cases of men suffering from incurale diseases who had produced discoveries or done work of immense value to the human race in the last few weeks of their lives. Were such men to be ex-

terminated? Might not the physician, in condemning a man to the lethal chamber, be robbing humanity of the possibility of a great product of such a man's brains? Moreover, once the right to death of incurables, with their own consent, had been admitted, the next step would be an admission of the right of other people to decide for them. Then the physician would become at once a suspect, and would lose the confidence of every one of his patients.

Surgery

DALES, J. A.: PLASTIC SURGERY OF PERIPHERAL NERVES.

J. Io..a M. Soc., 1919, ix, 155.

The author first reviews the structure and function of the peripheral nerves. In the diagnosis of a nerve lesion a careful history and examination, including the response to electric stimuli, are necessary.

There are four surgical lesions of nevres. First, involvement of the nerve in a cicatrix of surrounding tissues; second, partial severage by a bullet or instrument; third, puncture wounds of large nerve trunks by missiles; and fourth, complete severance.

Operation is indicated when there is complete division of the nerve, when the nerve function is injured and repair is arrested, and when there is severe neuralgic pain. Early operation is indicated except in the presence of infection. The best results in restoring a severed nerve are offered by direct union.

FOREIGN BODIES IN THE BLADDER AND THEIR REMOVAL

R. Hottinger (*Correspondenz-Blatt fur Schweizer Aerzte,* June 14, 1919), reports the case of a boy sixteen years old who introduced a bougie made of beeswax into his urethra as a means of preventing him from wetting the bed. The bougie slippel into the bladder and set up an obstinate cystitis. Boric acid solution was injected into the bladder and then about twelve c. cm. of xylol, which, being lighter than water, floated, together with the wax, on the solution and dissolved the latter. The patient was directed to massage the region of the bladder from time to time by pounding it, so as to hasten solution in the same way as by shaking a test tube. The patient complained of a moderate burning ,but of nothing serious. After four hours he passed a milky fluid from his bladder, from which the wax was separated as it cooled. Immediate systoscopy showed the bladder free from wax. The cystitis subsided rapidly.

RESULTS OF THE OPERATIVE TREATMENT OF ULCER OF THE STOMACH AND DUODENUM.

Otto Chr. Borchgrevink (*Acta Chirurgica Scandinavica,* May 1, 1919) devotes 123 pages to the review of work done from 1902 to 1915 by himself, Dr. P. Bull and others, a total of eighty-seven cases comprising seven different groups: ulcers distant from the pylorus with and without hourglass contractions, ulcers near the pylorus with and without dilatation of the stomach, duodenal ulcers with and without dilatation, the seventh group including ulcers operated upon for acute complications,

perforation and hemorrhage causing grave anemia. Sixty-four pages are devoted to case reports. The operation done in most cases has been gastroenterostomy. For ulcers near the pylorus and duodenal ulcers the results have been very satisfactory, comparing well with those obtained by the more radical method of resection of later years, as for instance the results obtained by Troell. The greater number of the colloated cases of ulcer near the pylorus have been associated with contraction and secondary dilation of the stomach, a feature particularly adapted to gastroenterostomy; and in the duodenal ulcers, usually unaccompanied by contraction and secondary dilation, the results of gastroenterostomy have even surpassed the former. Also gastroenterostomy, insofar as it has a lower mortality rate, is show to have better end results in the above cases than resection. In the relatively smaller number of ulcers distant from the pylorus, the results of gastroenterostomy have been less favorable.

LUMBAR PUNCTURE AS A FACTOR IN THE CAUSATION OF MENINGITIS.

Paul Wegeforth and Joseph R. Latham (*American Journal of the Medical Sciences,* August, 1919) report five cases in which meningitis followed the release of normal spinal fluid during a septicemia, and review the literature on the subject. Recently there has been a tendency on the part of clinicians to multiply the indications for performing lumbar puncture on patients suspected of having meningitis, but these cases show that the procedure is not always safe. To prevent the possible accidental production of a meningitis as a result of diagnostic lumbar puncture it is recommended: 1, That careful consideration be given the bacteriological study of the blood before such punctures are attempted; 2; that in acute diseases, in the absence of definite signs of irritation of the central nervous system, lumbar puncture should be avoided unless it is first conclusively shown that the blood stream is free from infection; 3, that when the clinical symptoms are such as to render a lumbar puncture advisable, minimal quantities of fluid should be withdrawn, sufficient only to permit necessary laboratory tests to be made; 4, that small bore needles should be utilized in performing the operation to prevent as much as possible subsequent leakage of spinal fluid into the surrounding tissues.

X-RAY TREATMENT IN TUBERCULOSIS ARTHRITIS

A Briton (*Presse medicale*, June 12, 1919) thinks the benefits obtainable from the x-rays in tuberculous joint disease are not sufficiently appreciated, and reports three cases, involving, respectively, the ankle, elbow, and vertebrae, in which apparent recovery followed their use. In the spinal case, the fourth and fifth lumbar vertebrae had been curetted two months before the author was consulted, but the wound had not healed and the infection had extended to several different points in the lumbar region. The x-rays were directed over the whole region every fortnight for three months, when treatment was interrupted by a severe attack of influenza. Three months after the interruption, when the patient returned, the wound and all the sinuses but one had closed, and the latter healed three months later. Treatment was kept up

at longer intervals for several months, and no recurrence took place. In the elbow case, the area had been curetted three times in the course of five years. yet fungous tissue recurred. X-ray exposures every twelve days resulted in recovery in two months, and the results have now been maintained six years.

DIAGNOSIS AND PROGNOSIS OF EPITHELIOMA OF THE GLANS PENIS

L. M. Betances (*Presse medicale*, June 12, 1919) reports three patients who consulted him about two and a half years after noticing a small red patch on the glans penis. In each instance the growth was hardly elevated above the surrounding membrane and the surface was red, even, of velvety appearance, slightly moist and shining, without ulceration, bleeding, or pain. Treated as warts or vegetative syphilides, these lesions had nevertheless continued developing. Excision of a small bit of tissue for microscopic study was resorted to in each instance. In one, the tissue seemed like a benign papilloma, but the author doubts that it actually was, as even slight deviations from even cell layers at the surface of the glans are suspicious. This patient, however, was lost sight of. In the other two cases, in spite of their apparent beningity microscopically, the tissue showed definite evidences of malignancy. In one of these the disease had already reached the lymph nodes a few months later. In the other, half the glans was amputated, but one year later there was manifest glandular involvement. The author concludes that whenever a red patch of papule of papillomatous aspect appears on the glans, biopsy should be immediately resorted to. These are generally pre-cancerous lesions or actual instances of cancer of the glans. Whether the miscroscopic appearance is that of a leucoplasia, a papillary epithelioma, or a deep-seated pavement epithelioma, the prognosis is serious. All transition forms between these conditions are met with, and the time that will elapse between one stage and the next cannot be predicted. The proper treatment for all these exerescences on the glans is wide surgical excision.

THE REMOVAL OF FOREIGN BODIES FROM THE TISSUES BY THE USE OF TRANSILLUMINATION.

A. G. BETTMAN, M. D.,
Portland, Ore.

The difficulty often encountered in attempting to remove foreign bodies from the tissues is well known. Even when roentgenograms are at hand or when fluoroscopy has been done, there is frequently great difficulty in removing the foreign body.

By the use of transillumination, any foreign body that will cast a shadow may be located in a surprisingly short time.

Having cut down to the supposed location of the foreign body and having arranged the light, the operator looks through a tube at the tissues, which may be held up or otherwise suitably manipulated. A dark room is unnecessary. When once the foreign body is located, it is a simple matter to remove it.

The tube may be of any suitable material, brass or other metal or a darkened test tube; a roll of paper may be used in an emergency.

The angle at which the tube is used

may be varied to meet conditions. Even deeply embedded material may be located frequently without the necessiy of putting the end of the tube into the wound.

407 Medical Building.—*Jour. A. M. A.*, Dec. 1, '19.

CARREL-DAKIN TREATMENT IN EMPYEMA.

John M. Henderson (*Northwest Medicine*, June, 1919) reports his experiences with the treatment of empyema by the application of the method of Carrel, using freshly prepared and titrated Dakin's solution. He finds that this treatment can be applied in cases in which there is free opening into the empyema cavity and in which the lining of the cavity is not too thin. There must also be no bronchial fistula. Every precaution must be observed and the treatment must be carried out exactly as laid down by its authors for use in other infected wounds. From four to eight tubes should be used and the solution renewed at short intervals. The first effects are the removal of the odor from the pus and the reduction in the amount of discharge, together with marked reduction in the evidences of toxic absorption. The progress must be followed by means of bacterial count and when this is reduced sufficiently the opening should be closed by suture or by adhesive plaster, or the cavity may be allowed to granulate up. In old cases with one or more pus pockets an attempt may be made to open these and irrigate them frequently with Dakin's solution, or the sinus and accessible cavities may be partially sterilized by irrigations with Dakin's fluid and may then be packed with Beck's bismuth paste and allowed to granulate up.

A NEW DRESSING FOR FRACTURED CLAVICLE.

A. Legrand (*Journal de medecine de Paris*, May, 1919) places the forearm and hand of the affected side behind the back and supports it there with a posterior sling. After four or five days the hand and forearm are gently brought around to the front of the thorax, care being meanwhile taken to keep the elbow in a posterior position. This movement is carried out for three or four minutes every day. Massage is practiced daily at the site of fracture. After twelve days, union having occurred, the forearm is carried forward for good and supported with an anterior sling for eight days. This treatment is in no way painful and readily keeps the head of the humerus back and away from the body—a result otherwise difficult to obtain.

STONER, A. P., FRACTURES COMPLICATING THE ANKLE-JOINT.

J. Iowa M. Soc., 1919, ix, 148.

The author gives a detailed description of the ankle. Formerly, before the use of the x-ray, many cases of fracture about the ankle-joint were diagnosed as sprains.

Fractures of the ankle-joint are most frequently the result of a fall or of jumping from a height, and the type of fracture depends upon the position of the foot at the time of injury. In setting the fracture the foot should be placed in the opposite posture from that in which the fracture occurred.

Points about Pott's fracture to bear in mind are:

1. Pott's fracture is always an eversion and abduction fracture.

2. The fibula is always fractured and usually within 1½ inches of the point.

3. The tibiofibular and interosseous ligaments are always ruptured, permitting more or less separation of the lower fragment of the fibula from the tibia.

4. For proper healing in Pott's fracture the foot should be placed in the most exaggerated adducted and inverted position and maintained in this posture until healing is complete.

5. An inversion fracture is never a Pott's fracture and should be put up in the reverse position, abduction and eversion.

6. The joint should not be exercised until after a period of eight weeks, and no weight should be borne on the foot for three or four weeks longer.

Book Reviews

Through the courtesy of the Bureau of the Census, we have received a copy of the Department of Commerce's Eighteenth Annual Report of Mortality Statistics. A great deal of labor has evidently been expended in the preparation of this report. Its value to persons interested in the subject can scarcely be overestimated.

Bacteriology in Abstract by A. B. Wallgren, B. S., M. D., Assistant Professor of Biology, University of Pittsburgh; Pathologist to the Pittsburgh Hospital, St. Margaret's Hospital and Columbia Hospital; author of Histology in Abstract and Pathology in Abstract; Pittsburgh Peuria.

Published by the Medical Abstract Publishing Co., Jenkins Arcade Building, Pittsburgh, Pa. Price $1.25. This second edition is considerably enlarged, containing only the elements of Bacteriology, will be found very useful to the student desiring a small reliable guide very thorough and exhaustive in its class.

The Practical Medicine Series, Vol. I, 1919. General Medicine, edited by Frank Billings, M. S., M. D., head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and Vol. II, on General Surgery, edited by Albert J. Ochsner, M. D., F. R. M. S., L. L. D., F. A. C. S., Major M. R. C., U. S. Army, Surgeon in chief, Augustana and St. Mary's of Nazareth Hospitals; Professor of Surgery in the Medical Department of the State University of Illinois.

These books are two of a series of eight volumes on the year's progress in Medicine and Surgery, under the general editorial charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northern University Medical School, Chicago. The Year Book Publishers, 304 Dearborn Street. Price of each volume, $2.50. The series of eight volumes, $10.00.

This is an old publication and the profession at large is most generally acquainted with its aims and value as simplifying the latest tend of professional opinion on the various subjects under consideration which subjects cover the whole range of Medicine and Surgery.

The general practitioner may select the volumes of most interest to himself without the necessity of useless monetary outlay for something he does not want.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 7 HUNTINGTON, W. VA., JANUARY, 1920 Subscription $2.00 per Year
Single Copies 20 Cents

FRACTURES

By Wm. W. Golden, M. D., F. A. C. S.,
Elkins, W. Va.

Read at Annual Meeting of West Virginia Medical Association, Clarksburg, May, 1919.

It was the elder Flint who in answer to a question what was the best treatment of typhoid fever said, a good physician. In reference to fractures I believe that the best treatment is a good surgeon, and this, too, could be further qualified by saying that it should be a good surgeon who pays special attention to fractures. I know surgeons who are doing good abdominal surgery but whose work in fractures is very poor. Beginners in surgery, as a rule, pay insignificant attention to fractures. The glamour of a single appendectomy is more attractive to them than a good anatomical as well as functional result in a fractured femur. One reason lies in the fact that fractures are dabbled with by every doctor and, therefore, their treatment fails to confer surgical distinction. Another is the comparatively small fees. The time and labor consumed in the average case of fracture are greater than in the average case of any other class of surgery and the usual fees are smaller. In this respect fractures hold the same relation to general surgery as does obstetrics to the general practice of medicine. In both of them, too, the responsibility is the highest. But in fractures, as in obstetrics, the satisfaction that goes with work well done is of the highest. Pay or no pay, it is a source of true happiness to the surgeon to see his patient with a Pott's fracture walking the streets of his town with feet as good as ever, or to look at the perfect wrist of the young lady who paid with a Colles for careless skating. Furthermore, as in obstetrics, there is a certain amount of indirect reward which almost makes up for the smallness of the fee. In both the gratefulness of the patient is a substantial business asset. Nothing serves so well to strengthen the relations between the practitioner and the patient and the patient's family. Frequently these re-

LIBRARY OF THE
COLLEGE OF PHYSICIANS
PHILADELPHIA

lations transcend their professional character, and warm, life-long friends are made.

The time for complete satisfaction with mere functional results is passing, if it has not already passed. In point of fact there never was any real satisfaction with angulation, thickening and other deformities, even when function was perfect. What appeared as satisfaction was merely a sense of submitting to the inevitable.

The use of the X-rays has much to do with this demand of perfection. Fortunately, this agency has gone a long ways to aid us in the matter of meeting this demand. By the use of this agency the subject of fractures has emerged, on the one hand, from the region of dogmatism and tradition in our textbooks, and, on the other hand, from mere speculation or guess at the bedside. There is another circumstance to my mind which is proving of great help in placing the subject of fractures on a scientific basis and is rendering the art connected therewith more efficient than ever. For the last two or three decades great surgeons as well as small have been captivated by surgery of the viscera. It was a new field and a very obscure one. Fitz in the eighties started the ball rolling with his studies and work in appendicitis. It soon became decidedly fashionable for every surgeon to pay almost exclusive attention to visceral surgery. A surgeon who paid attention to lesions of the skeleton, especially fractures, exposed himself to the risk of being considered out of date. To pay particular attention to fractures seemingly meant to descend from the high plane of advanced modern surgery to the common level of the old time family practitioner. A marked change is now taking place. In the last few years surgeons of great ability have taken up the subject of fractures. With Cushing's surgery of the pituary body visceral surgery seems to have reached the highest water mark of surgical activity. The pathological and technical puzzles in connection with diseases of these organs have been largely solved and the inquisitive surgical mind is in search of new fields for exploration. The field of fractures is attracting attention, for it has not yet been studied extensively in the light and with the aid of recent discoveries and methods. Lane, Albee and others are leading the way, and I predict that soon all who are aspiring to recognition as general surgeons will take as much pride in getting a perfect result in a case of fracture as they do now in the refinements of sartorial work on the intestines.

We, in industrial West Virginia, are having very large numbers of fractures to treat. The subject of fractures, therefore, should be of particular interest to us in the interest of our patients. It also imposes an obligation upon us to utilize our material in the interest of the general science and art of this subject. About three years ago I made a pilgrimage to the best known hospital in Massachusetts especially for the purpose of seeing fracture cases in the service of a surgeon who wrote a useful book on fractures. I found but two cases of fractures in this service at that time. A year later I did the same to a well known hospital in Philadelphia to see fracture cases in the service of a surgeon whom I heard discuss fractures very interestingly on a previous occasion and found but one case of fracture under treatment in that hospital at that time. It was the consideration of these facts which led me to choose the sub-

ject for this paper when urged by the Secretary of this section to have a paper for this meeting. I hope I may succeed at least in arousing greater interest in the subject especially on the part of our younger men who are aspiring to surgery.

About as interesting as anything recent in connection with fractures is the clearer understanding we now have of the physiology and pathology of bone repair and bone necrosis. Entirely undue importance was ascribed to the periosteum in former days. Important it is but not in the same way, nor to the same extent. The periosteum has no osteogenetic power whatever. It is an additional medium of blood supply to the bone. I say additional, because the bone is richly supplied with blood from its nutrient vessels through the marrow and Haversian canals, and in the case of the long bones some of their blood is derived from the articular ends. Bone is a connective tissue structure, and like this consists of three elements: the essential or parenchymatous cells, known as osteoblasts, an intercellular substance which is of a calcareous character, and of blood vessels as already referred to. The osteoblasts alone produce bone. For this purpose they need a liberal blood supply. The destruction of the periosteum diminishes the blood supply. Osteogenesis, however, may not be impaired thereby, provided the rest of the blood supply is good. But a high degree of irritation frequently results in producing exudation to such an extent as to choke off the blood supply within the unyielding Haversian canals. Necrosis then follows and this with greater certainty in the absence of periosteum. I was rather slow in accepting this view in spite of its beautiful plausibility. Apart from being ingrained with the old teaching that the external callus is a periosteal product, repeated opportunities for observing this callus in the different stages of its formation in which it and the periosteum seemed as absolutely one made it hard for me to dissociate the periosteum from osteogenesis. However, I came across a case in which good surgical reasons demanded the stripping of the periosteum with its partially formed callus for some distance from the fractured ends of a femur which, nevertheless, was followed by good union without necrosis. This completed my conversion to this view.

In this paper I intend to avoid discussing compound fractures, and yet it is such an important phase of the subject of fractures and some of the new features of treatment are so fresh in everybody's mind that I feel I must at least touch upon it. Compound fractures where the wound through the skin is made from within outwards by the broken ends of the bone in my experience have healed kindly, the fracture soon becoming simple with a minimum of treatment. In cases of a different etiology I have in the past had my full share of troubles. I am pleased with the Carrel-Dakin method, although in no cases as yet have I been able to get complete primary union of the soft parts. In some cases the mouth of the wound is so placed that I have found the application of this treatment impracticable. There is one method that I have come to value more than anything else in the treatment of these cases, viz., free excision of damaged tissue along with the removal of all dirt and debris.

As to operative treatment in simple fractures. After watching the work of bone-grafting and studying its appli-

cability to new fractures, I have come to the conclusion that it has but a limited degree of usefulness in such cases. In the hands of the general surgeon this will always be a very large and much time-killing undertaking, inflicting upon the patient additional risk. In cases of non-union or vicious union I believe this procedure to be the very best and no doubt presently we will all be doing it. I believe that plating, wiring and nailing will continue to be the choice procedure for internal splinting in fresh cases where such splinting is necessary. All these procedures, however, will be less frequently resorted to in proportion to the greater practice of attention and skill in manipulative treatment.

As already stated or implied, the treatment of fractures involves a great deal of hard work, as well as great responsibility. Not frequently, however, we get cases the treatment of which requires very little effort, in fact they almost take care of themselves if nothing is done to add to the existing injury. I have in mind, for instance, fractures of long bones about their middle where there is an insignificant amount of injury to the surrounding soft tissues and transverse in character, or where of two parallel bones only one is fractured, or in a fracture of the clavicle within the limits of the coracoclavicular ligament, or of the radius within the limits of the insertion of the pronator radii teres, and the like. In many such cases, if, to use an expression of the late Joseph Price, no acrobatic surgery is attempted in eliciting crepitus, nor needless tight splinting is done thereby reducing nutrition of the parts, in brief, if nothing is done to interfere with the conditions as found except to protect them, they make excellent recoveries, reflecting undue credit upon the practitioner in charge. In fact, some of these cases occasionally recover with splendid results in spite of methods of treatment that are worse than no treatment at all would have been. There is one unfortunate feature about this type of cases, viz., their results are often set up as a standard for fractures of the same bones but a different type. I recall an old general practitioner who once upon a time had a fractured clavicle under his care which united with a perfect anatomical result. I heard him cite this case many times to prove how clever he was as compared with certain other physicians whose cases of fracture of the clavicle healed with some bits of deformity. I happened to come across the old doctor's case and an examination showed that the fracture was external to the coracoclavicular ligament. As this was the only case of the clavicle that the old doctor ever had in an adult, he justly boasted of 100 per cent perfect results in fractures of the clavicle, but he was entirely innocent of a proper understanding of the mechanics of the part to realize that the perfect result he obtained was in spite of his method of treatment, which would have been worthless, had the fracture been of a different type. All of which teaches the need not only of charity but a comprehensive knowledge of and experience with fractures as well before passing judgment upon the results of fellow practitioners.

So much for the subject in a general way. I shall now take a few minutes of your time with brief notes on specific fractures, limiting myself to the most common and touching only upon such points as would indicate my common practice and attitude.

In *fractures of the cranium* the bone lesion is not only submerged in the larger

problem of concomitant brain injury but in itself presents comparatively little difficulty in management, at least there is little room for difference of opinion and practice. I will dismiss this subject with the statement that in basal injuries I am not impressed with the value of decompression.

In all of the *fractures of the malar bone* that I have seen deformity was the only result, the body of the bone being firmly wedged in the zygomatic fossa without interfering with the action of the lower jaw. I have never succeeded in reducing any of them by manipulation and have never deemed it wise to convert a simple into a compound fracture in this part of the anatomy. The recommendation in books to make use of hooks, corkscrews and the like have never appealed to me.

In *fractures of the inferior maxillary* I have found a competent dentist a useful ally and occasionally have entirely turned over such cases to him.

If it is so that no obvious dislocation of the vertebrae ever occurs without a fracture of the articular processes, then I have seen two cases of *fractures of the lower dorsal vertebrae* in which there was complete functional recovery by merely keeping the patients on their backs for some weeks. Some deformity persisted. In both these cases moderate nerve symptoms were present for about 24 hours after the injury. In several cases in which complete paralysis occurred below the level of injury and in which I resorted to laminectomy it has not been my good fortune to strike a type of cases in which the operation was of any consequence.

Of all fractures the common type of *fracture of the ribs* is perhaps among the simplest to treat. But where these consisted of a detachment of the ribs from the sterum I have in several cases found it impossible either to accomplish complete reduction or, when this was accomplished, to maintain the parts in apposition. Deformity was the result but without any functional disturbance. In some of these cases, however, the patients were inclined in subsequent years to attribute all their thoracic ailments to this failure of reduction.

Fractures of the *pelvic bones,* when above the brim of the true pelvis have never been a subject of much concern for, as a rule, I have found very little displacement, the heavy muscular paddings serving well as natural splints. When, however, the lesion is below the brim, especially when involving the pubic arch, the situation is usually similar to that of the cranium, i. e., the fracture becomes a small item in the presence of the usually concomitant visceral injury, such as rupture of the bladder.

Of course, I have had my share of *fractures of the clavicle.* I do not have in mind the less common types in which the site of the fracture is either at the attachment of the coracoclavicular ligament or to the outside of it. In these cases, as already alluded to, there is practically no displacement, the outer fragment retaining its level and direction with the inner fragment indirectly through the aid of the inner fragment by means of the coracoclavicular ligament below and the sternomastoid above. These type of cases give perfect results with a minimum of treatment and their main interest lies in that they are often used by the uniformed as the standard of results in clavicular fractures in general. I have in mind the common type, fractures about the middle of the bone,

i. e., internal to the coracoclavicular ligament in which displacement is always great and proper treatment is of consequence. I know of one method only which produces perfect results and that is the recumbent posture. But with one exception, a case on hand now, I have never been able to get my patients to submit to it, except in instances where other injuries coexisted which compelled the patient to stay in bed. Of such instances I have had several. In the ambulatory treatment I usually use the Sayre method, but have in a number of cases found equally good results by a reinforcement of the ordinary triangular sling with some adhesive plaster. However, I have never observed an entirely perfect anatomical result from any of the ordinary methods of ambulatory treatment, whether used by myself or others. Another thing, I have seen a number of cases in which the manner of treatment was worthless and yet union has always taken place with a good functional result and with a deformity only a little worse than that following pains-taking ambulatory treatment. I never saw nor heard of non-union in fractures of the clavicle under any kind of treatment. I saw one man who died from a fracture of the clavicle within ten minutes after its occurence, due to laceration of the subclavian artery by the sharp broken ends of the bone.

I always dislike cases of *fractures of the anatomical neck of the humerus.* There is usually not enough ill consequences to make me feel justified in urging operative measures, nor is the patient, for the same reason, willing to submit to it. And yet some pain and some limitation of motion are apt to remain to make such a case an eye-sore.

Barring high *fractures of the surgical neck of the humerus* with an unusually ugly displacement, all fractures of the shaft of this bone have given me, as a rule, very satisfactory results by means of the wedge-shape pad. In high fractures of the surgical neck immobilization in abduction is helpful.

Fractures of the lower end of the humerus, with or without involvement of the joint, are still a source of worry to me. My results, however, have been better since I have adopted the method of acute flexion which I have used quite frequently, and since I have learned not to hesitate to put some cases in complete extension. There is hardly another part of the skeleton in which the use of the X-ray proves so useful.

Colles fracture I find among the easiest to treat. Nearly the whole treatment lies in reduction. That done, the rest of it is very easy. Occasionally the impaction is such as to make it quite satisfactory to leave it alone.

Fractures of the corpal bones are not as rare as some think, especially of the scaphoid. A painful and swollen wrist following an injury should never be disposed of as a sprain until careful X-raying is done. I say careful advisedly, because one may be competent to interpret the shadows of other bones and yet be at sea with the carpus.

Fractures of the upper part of the radius when either above or below the insertion of the pronator radii teres I have found impossible to reduce and to maintain in apposition by non-operative measures. Once in a great while I have come across a fracture right at the insertion of this muscle. Such cases are interesting, first from the fact that without the aid of the X-ray they are overlooked, for there is no displacement of

the fragments, and, second, because a good result is obtained with a minimum treatment.

In *fractures of the neck of the femur* I believe the Whitman plan of treatment the most satisfactory. With the abduction, lifting of the great trochanter with slight inward rotation should not be overlooked. One will probably have better success with this method if he will take the trouble to gain an understanding of the modus operandi of this method as well as its technique. I refer to the role which the capsule plays in it.

When bone-plating first came into vogue I thought I saw indications for it in nearly every *fracture of the shaft of the femur.* I plated many. The immediate operative results were always good. I never had any infection. The final results were also good, but only as a rule. I had a few cases with delayed union which I attributed to the presence of the plate. Some of these resulted in final healing with some angulation without displacement of the ends. This has led me to a return to earlier methods and I find them generally sufficient, although very taxing for they often require repeated attempts at reduction and repeated X-raying. In fractures of the lower third I have had to resort in one case to section of the tendon Achilles to make reduction possible. The ordinary double incline splint serves me well in fracture of the upper and lower part of the shaft, and once reduction is accomplished I do not find extension necessary.

My results in ordinary cases of *Pott's fracture* have been very gratifying to me. I have seen a goodly number of failures in the hands of others. These failures were due in every instance either to a failure of replacing the backward displacement of the foot, thereby causing serious limitation of extension, or to a failure to over correct the eversion and thereby rendering the external malleolus incapable to hold the foot in its proper position. In cases accompanied by fracture of the internal malleolus I have often resorted to nailing this fragment, thus insuring some support for moderate overcorrection. Fractures of the fibula in its middle or upper parts I have found of no consequence. This I consider rather fortunate, as reduction without operative measures I have found as a rule impossible.

Fractures of the *tibia,* with or without the *fibula,* other than those mentioned, are sometimes troublesome, but, as a rule, not from the point of view of functional results. Perfect anatomical results, however, are rather an exception without operation. My experience has been that the danger of infection is greater in operating upon the tibia than any other long bone.

I hope I have not wearied you with these personal experiences, many of which have probably been common to most of you.

THE FAILURE OF RESTRICTED OPERATIONS IN CANCER OF THE BREAST.

By ALEXIUS MCGLANNAN, M.D., Baltimore, Md.

Read at Annual Meeting of West Virginia Medical Assn., Clarksburg, W. Va.

It is now more than 25 years since Halstead published his method of operating for cancer of the breast (Md. Medical Journal, April 6, 1888, XIX, 29) and proved the technical possibility of

carrying out the ideal maneuver for the cure of cancer, namely, the removal of the tumor with its containing organ, the draining lymphatic glands and the intervening lymph channels in one piece, without cutting across any tissue involved in the growth or its extension.

W. Meyer, working independently published his operation about the same time. (Medical Record, Dec. 15, 1894, XLVI, 746.)

The two operations differ in details, the most important one being the treatment of the clavicular bundle of the pectoralis major. Both operations are based on firm pathological and anatomical foundations.

During the interval of twenty-five years many modifications of the breast operation have been published, several of which restricted the extent of operation for one reason or another, most often to allow complete closure of the skin, or to preserve the pectoral muscles. It is worthy of note that in the hands of the originators and of those who have come directly under their influence, the tendency has been to increase the extent of tissue removed.

Anyone who wishes to experiment with cancer cures must study his patients for many years after treatment. Late recurrences and metastases are common enough to mislead an individual who places his reliance on statistics of immediate cure or those of two or three years' duration.

Of the many contributions to the subject made in recent years, the most important is that of Handley (British Medical Journal, October 1, 1904.) This author made a most exhaustive study of the lymphatics of the breast, their permeation by cancer and the direction in which the malignant cells extended out from the primary focus. As a result of the study, he advised the removal of the fat and fascia of the upper external oblique and recti muscles.

The following is an outline of the operation as we perform it today. The first incision is through the skin around the breast, making a rough circle whose circumference everywhere is two and one-half inches away from the outer edge of the tumor. Varying positions of the tumor will place this skin circle high or low, towards the mid-line or into the axillary region. From above and below radiating incisions are made to the shoulder and toward the umbilicus.

The skin flaps so outlined, are reflected back, free from fat, until an area of fat is exposed from the clavicle to the umbilicus and from the mid-sternum to the border of the latissimus dorsi muscle. It often becomes necessary to split one of the skin flaps in order to make this exposure.

The fat is then cut through and with the fascia is dissected back until the underlying muscles are exposed. We usually begin by exposing the latissimus dorsi, then the abdominal muscles, the pectoralis major and the sternum in turn.

Depending on the position of the tumor a greater or smaller clavicular bundle of the pectoralis major is left. With tumors in the upper quadrants the smaller bundle is preserved. The pectoralis major is split along the decided line and the pectoral bundle divided between clamps at its attachment to the humerus. The clavicular bundle is retracted and the fat and fascia dissected from beneath it to expose the subclavius muscle and the insertion of the pectoralis minor. Several vessels must be divided between clamps and ligated in the

course of this dissection. The pectoralis minor is now divided and the fat and areolar tissue bearing the lymph glands dissected from the axillary space. The number of branch vessels and the degree of infiltration of the areolar tissue make this part of the proceeding simple or difficult. The pectoralis major is now divided along its sternal attachment and with the rectus is lifted from the ribs. Care should be taken to avoid damage to the perichondrium and periosteum of the ribs during this maneuver. A stump of the pectoralis minor is left attached to the ribs, unless the tumor happens to be situated over the locality of the origin of this muscle.

The mass having been freed below and in the axillary line, the fat in the subscapular space is now dissected out, avoiding injury to the subscapular vessels and nerve. This separates the tumor tissue entirely and after all bleeding has been constricted, the wound is closed to the best advantage possible.

As a rule an area about two inches in diameter is left unclosed on the chest wall. Formerly this space was covered with a skin graft from the thigh at the primary operation. At present the graft is not used because we expose the area to X-ray cross fire treatment during the period of convalescence and we have found this exposure detrimental to the grafts.

In closing our only effort is made to secure a skin covering for the axillary vessels, so as to form a high fornix without any tension. With a tumor in the axillary quadrant, the removal of our wide area of skin may make it necessary to turn a flap from the scapular region into the axillary defect. (Tansini's operation.)

The wound is dressed with the arm in abduction. This position of the arm is most important for its subsequent function. With the arm adducted it is easier to close the skin wound, but if we sew the arm down to the side of the chest, we can not expect free motion of the shoulder after the wound has healed. When the dressing holds the arm in abduction, the patient always becomes able to take what Meyer has called the "Statue of Liberty Posture." (Annals of Surgery, July, 1918. lxviii 23.)

Complete control of hemorrhage during the operation and clean cutting dissection makes shock a rare complication.

In 92 cases I have had four post-operative deaths, two from streptococcus infection, and one from pneumonia in a patient who had the complete operation performed on both breasts at a single session, and one on the 26th day from pulmonary embolism.

These ninety-two patients have been operated upon in the course of fourteen years. In eleven cases the operation was rstricted because it was intended only as a palliative measure.

In twenty-eight cases the time since the operation is less than three years. Eight of these patients are dead of cancer, and one has evident general carcinosis, but is still living. Of the remaining sixty-four cases, thirty patients are dead, most of them from cancer, and sixteen patients can not be traced. The average result as to cure in all the cases is about forty per cent.

During these same fourteen years, ten patients have been observed after restricted operation. Seven of these had local recurrence, coming on from four months to one year after the restricted operation. Six of these patients are dead of cancer. One of the patients in

this group had two restriuted operations before we dissected out the axilla and removed the muscles as a palliative procedure. This woman was afterward treated with the cancer cytolysin and it was believed by some of her physicians that the cytolysin prolonged her life. This belief was fallacious, as is proved by a parallel case in which Dr. Bloodgood operated and where no cytolysin was used. The second patient lived six months longer than the treated one. As yet we have no cure for cancer except early complete operation.

Of the ten patients mentioned above, the remaining three are living. The local recurrence came on two years or later in two cases, and the other one is a patient who had a cancer excised two weeks before the complete operation was performed. The onset of the tumor was noticed only a few weeks before the local excision. The tumor is an adenocarcinoma and painstaking examination of the tissue removed at the complete operation fails to discover any recurrence or metastasis. We hope that we have cured this patient, but as less than a year has elapsed since the operation, we can not be at all certain.

In the experience of other surgeons, the removal of the tumor followed after an interval by the complete operation, has been practically always unsuccessful and such a proceeding can not be too forcibly condemned.

The surgeon who first operates on a cancer settles the possibility of cure of the patient.

A thorough operation performed late in the disease offers a greater hope for cure than a restricted one done early.

115 W. Franklin Street.

THE SHICK REACTION

By DR. W. E. SMITH, Minden, W. Va.

Read at the Meeting of the Fayette County Medical Society, at Oak Hill, November 11, 1919.

Mr. President and Members of the Society:—

Inasmuch as our president has so graciously allowed us to choose our own subject for the paper we inflict on you tonight, I decided to discuss with you in an informal way The Shick Reaction.

This choice of a subject should appeal to you as the test is not only thoroughly reliable and of practical utility but also because it will not take me long to read the data I have collected on the subject.

Schick's test as you know, is a test for a condition of immunity against diphtheria toxin—in other words a test for susceptibility to diphtheria.

B. Schick, who first described this test in 1913, is a German, but it was described in the Archives of Pediatrics in 1914 and again by Weaver and L. K. Maher in *The Journal of Infectious Diseases,* March, 1915, and also in *The Journal A. M. A.,* July 10, 1915. Most of the data I have is taken from the works of G. H. Weaver of The Durand Hospital, Chicago, and from the second edition of *Kerley's Practice of Pediatrics.* As it has been some time since it was introduced I don't think it necessary to go into too much detail on a subject with which you are probably familiar.

We may, however, speak briefly on the principles underlying the application of this test. Schick's test is a test for a condition of immunity against diphtheria toxin. As you know, the changes in diphtheria are due to the action of the

toxins produced by the diphtheria bacilli at the point of entrance to the body. Immunity against diphtheria depends upon the presence in the body of the patient of antitoxin; that is, the specific diphtheria antitoxin. A person is immune, is insusceptible to the action of the diphtheria toxin, because immediately after the toxin is introduced it is neutralized and therefore without effect. Schick's test depends on this fact. The technic is carried out in the following manner: A diphtheria toxin which is simply a solution of the products of the diphtheria bacilli and contains the toxin is first standardized as to its effect on guinea pigs, and the smallest amount of the toxin that will kill a 250 gram pig is determined. This amount is known as the minimum lethal dose.

When this dose has been determined a certain small amount of it, about 1-50 of the M.L.D. is used in a man for making the test. This toxin is injected into the skin as is done in the tuberculin test. The injection is intracutaneous. It must not be injected through the skin, for if you do you will not get the reaction even in a susceptible person. The amount injected is 1-50 of the dose which is sufficient to kill a guinea pig.

The toxin is so diluted that the required amount is contained in 1-10 C.C. the dilution being made with physiologic salt solution.

The dilution is very unstable but the large drug houses put out the toxin in capillary tubes like smallpox vaccine and the salt solution in a separate vial and a man as lazy as I am has no excuse on the ground of its being too much trouble or too intricate. The injection is made with a finely graduated syringe that will inject accurately 1-10 C.C.

A very fine needle with a sharp and rather short point is needed in order that the opening of the needle shall be covered as soon as possible after it passes the skin. When the fluid has been injected and the needle withdrawn the opening closes. When the needle is properly introduced into the skin you can usually see the opening in the needle through the translucent upper layer of the skin. At the point of insertion there occurs a slight whitish blister-like, punctate appearing elevation, the slight depressions corresponding to the hair follicles.

Until one becomes familiar with the appearance of the reaction it is a good plan to make a control injection in the other arm from that in which the first injection is made. The middle of the outer side of the arm is used in either case. The control injection contains the same amount of toxin as the first injection, together with several hundred times the necessary antitoxin to neutralize the poison.

If the patient has no antitoxin in the blood, after twenty-four to forty-eight hours, there develops what we call a reaction. This reaction appears as an area of redness, about the size of a dime sometimes a little larger. Together with the redness there is a little swelling; but there is not much elevation. The redness is fairly sharply outlined and is a little brighter than that which occurs in the tuberculin reaction. If the patient, however, has even a small amount of antitoxin in the blood then nothing occurs when the toxin is injected, and we have what we call a negative reaction; that is, absence of reaction. If a positive reaction occurs in a patient who has no antitoxin in the blood there is an absence of reaction in the control arm. The toxin in the control arm was neutralized

before it was injected. In every case in which a reaction appears in the test arm and no reaction in the control arm the person is susceptible to diphtheria.

There are certain cases in which it is difficult to tell whether there is a positive reaction or not, because we have what are spoken of as pseudo-reactions. Pseudo-reactions are explained in different ways, and probably are due at times to different causes. They apparently are largely due to the products of the diphtheria bacillus which are in the solution, but are not in the nature of toxin; bacterial products which call forth some reaction in the tissues and are not neutralized by the diphtheria antitoxin. In a case in which we have antitoxin in the blood we may still have the pseudo-reaction. The pseudo-reaction occurs in the control arm as well as the arm which received the injection of toxin only.

This fact that the pseudo-reaction occurs in the control arm as well as the test arm is the main argument for the control injection. The pseudo-reaction is found extremely rarely in young children, in only a small percentage of older children, and more frequently in adults who have antitoxin in either a small or large amount.

The pseudo-reaction comes on very rapidly, and, as compared with a true reaction, there is apt to be more swelling and it is more transient, disappearing, usually, inside of two or three days.

The positive reaction, after reaching its height inside of twenty-four to forty-eight hours, fades very gradually, so that at the end of a week there is still some redness remaining. The redness first becomes less vivid, changing later to a brownish tint, and there finally remains a little area showing brownish pigmentation and commonly slight scaling. That is the typical course. Pseudo-reactions usually disappear in two or three days leaving no pigmentation or desquamation.

This is in the main a description of the test as first described, but Koplik and Unger have modified the technique in order to eliminate as far as possible the occurrence of the pseudo-reaction and this modification has apparently the sanction of Kerley. It simplifies matters wonderfully and Koplik and Unger claim it eliminates the pseudo-reaction in seventy-five per cent of the cases. Quoting Koplik and Unger their technic is as follows:

"After an area of skin on the forearm has been cleansed with alcohol, the latter is encircled with the thumb and index finger, and the skin held tense between them. The needle is dipped into the pure undiluted diphtheria toxin and then immediately inserted intradermally not subcutaneously. The needle is an ordinary hypodermic bent at a distance of one-quarter inch from its point so as to make an angle of about 170 degrees. The angle aids in inserting the needle intradermally. From the place of bending to the point it is shielded so that only the unshielded one-quarter inch can be inserted into the skin. The needle is so constructed that when it is inserted the quarter inch the amount of toxin carried is approximately 1-50 the minimum lethal dose. There can be nothing simpler than this technic. It is practically painless and obviates diluting the toxin and one can dispense with the paraphernalia needed for this purpose. Koplik believes the pseudo-reaction due to trauma on account of injecting the skin with the diluted toxin which is more bulky and not to anaphylaxis.

Now, as to the frequency with which these positive or negative reactions occur: We understand that if the patient has a positive reaction that the patient does not possess diphtheria antitoxin, a negative reaction, that the patient has diphtheria antitoxin, and is immune to diphtheria toxin and consequently immune to diphtheria infection.

Among infants experience has shown that 85 per cent are immune to diphtheria only about fifteen per cent giving a positive reaction. Of those between two and five years of age about 65 per cent give a positive reaction, showing that between those ages we have a large proportion of children who are susceptible to diphtheria. From five to fifteen years the proportion of children who are susceptible is about fifty per cent. The percentage of susceptibility gradually decreases as age increases, and from fifteen years on the percentage of susceptible individuals falls, so that somewhere between 10 and 20 per cent of adults are susceptible to diphtheria.

The generally accepted explanation for this presence of so-called normal antitoxin is that infants inherit their antitoxin from the mother, and it is transferred through the placental circulation direct to the child, so that the child is born with immunity and is immune in the majority of cases until it reaches the age of one or two years and sometimes until it is much older. The gradual elimination of this antitoxin inherited from the mother results in an increasing proportion of susceptible children up to about five years. The decreasing susceptibility after that age can probably be explained by the occurrence of diphtheria mild and unrecognized which is followed by an immunity more or less permanent.

Now we will speak briefly of some of the practical applications of the test. In the routine use of diphtheria antitoxin for immunizing purposes there is a good deal of discussion as to how it should be used. When first introduced you will remember the statement was made that it was entirely harmless, that any one exposed should be immunized, without any regard to age and without any possibility of danger.

Larger experience, however, has shown that there was connected with the injection even in the small doses needed for immunization a certain amount of danger, not usually danger to life, but danger of certain all-fired uncomfortable occurrences, long walks on snowy nights when you are dead for sleep to see a case of serum sickness and quiet an anxious mother, and very occasionally danger for the life of the person. And not only was there the immediate danger of discomfort which accompanied the serum reaction, but also the fact that you sensitized the patient to horse serum; in which case there would be the remote danger that if the patient was subsequently injected with horse serum a violent reaction might ensue.

We have in this Schick test a means by which we can pick out those individuals who are susceptible to diphtheria. When an epidemic is prevalent, and in any case where individuals are exposed to infection, by testing in this way we can pick out those who are susceptible. The others being already immune require no antitoxin and there is nothing gained by giving it to them. Thus immunizing doses of antitoxin can be restricted to those who lack it. Also, there is the matter of expense which must be

taken into consideration, especially among those of us who do an industrial practice.

The Schick test costs about sixteen cents per test and those found susceptible can be immunized by the toxin-anti-toxin method for eighty cents. As you know, however, this toxin-anti-toxin method is slow, immunity not coming on for about three months and we still have to resort to serum immunization for recent contacts.

There are other cases where the test is of considerable value. It is useful as a diagnostic and in anginas of various kinds. As you know there are cases of tonsilitis, cases of syphilis and anginas of various kinds where the appearance of the throat makes one think of diphtheria. These cases are usually not urgent. You are just suspicious. Give this case a Schick test at once or give him antitoxin in an immunizing dose. Don't hesitate, or like the woman who hesitated you will find out too late.

If you give the Schick test and at the end of eighteen hours it is positive, you will of course, give antitoxin anyway, but if the case was one in which you felt justified in waiting and the Schick was negative you have saved your antitoxin and the patient is spared the itching that follows it.

In the Durand Hospital, at Chicago, they do not give antitoxin to cases of angina even when a culture from the throat shows diphtheria bacilli if the Schick is negative. It shows these patients are not susceptible to diphtheria. They are simply carriers and carriers are always immune; they have a large amount of antitoxin in the blood.

I hope nothing I have said will be construed as indicating that I would restrict the use of antitoxin in diphtheria. It should be given in every case as early as possible and in sufficient dose to control the disease. The danger from diphtheria is so much greater than that from the very rare serum reaction that fear of the latter should not deter one from administering diphtheria antitoxin in every case of diphtheria.

And further I do not wish to detract from the great value of immunizing injections of antitoxin in children exposed to infection, but only to urge that such children as are already immune be spared what is at least valueless in their cases.

HEAD INJURIES; SOME CASE REPORTS.

J. M. EMMETT, M.D., AND R. J. WILKINSON, M.D., C. & O. Hospital, Huntington, W. Va.

Read before the Cabell County Medical Society, November 18, 1919.

The treatment in traumatic brain surgery has undergone very radical changes during the past five years. In 1910 William Sharpe first published his experiments on intracranial pressure as a cardinal factor in traumatic brain surgery. His findings were very similar to those published by Cushing in 1906. It has been only a few years since medical teaching was that the proper treatment for fracture at the base of the skull was to isolate the patient in a dark room and await death or if the patient recovered to anticipate a life of altered mentality and often epilepsy. Even today many capable surgeons allow their head case to go untreated, unless there is a frank fracture or a local paralysis due to a focal lesion.

We have frequently seen patients with

medullary odema kept in the ward until the following morning or until some convenient time when an X-ray could be made. The X-ray is of decided importance in the diagnosis of head injuries, but it often found that the symptoms are so alarming as to demand immediate treatment. The real value of X-ray work in traumatic heads is in making a diagnosis of a depressed fracture. Even in depressed fractures there is immediate indication for a decompressive operation because it allows the brain to herniate away from the depressed area, thereby better enabling us to elevate the depressed bone without destruction to the underlying cortex.

It is important to remember that it is not for fractured skull or an intra-or extra dural hemorrhage that we operate, but it is for the relief of intra-cranial pressure. Sharp's work at the New York City Morgue proved that forty per cent of the patients that die from head injuries have no fracture, and that sixty per cent do not have hemorrhage. It is also true that many patients with fracture of the skull give no symptoms demanding operation. The real pathology that demands our attention is intra-cranial pressure. This increased pressure may be caused by depressed bone, a hemorrhage, large or small, or a simple shaking up of the head. In other words, anything that alters the ratio between the secretion of the cerebro-spinal fluid from the choroid plexus and its absorption in the lymph and venous sinuses is sufficient to produce alarming symptoms.

Every case of head injury should be treated expectantly. They should be put to bed and kept in head elevated position and a careful neurological examination should be made daily or oftener if the symptoms indicate it. The pulse should be taken every thirty minutes as any slowing of its rate usually indicates an increased intra-cranial pressure. A slow, full, bounding pulse is most often associated with a beginning medullary oedema. The ideal time for the selection of operation is while the pulse rate is going down. We do not believe there is a case reported in literature where the patient ever recovered when the operation was done after the pulse rate had gone beyond 120 after having once been slow. A rapid increase in pulse rate means a complete medullary oedema with vagus paralysis. The operation of lumbar puncture should be done and the intra-spinal tension measured. The fluid should be examined for blood and infection. An estimation of the pressure is of paramount importance because a simple tapping of the canal gives us a poor index as to the pressure.

Another diagnostic principle is an accurate observation of the fundus of the eyes. After the intra-cranial pressure has persisted for eight hours, there should be slight changes in the discs. No patient with choked discs following injury should be allowed to get progressively worse without some surgical intervention. A spinal puncture for the relief of choked discs is like a needle aspiration in a psoas abscess. If the spinal punctures are repeated sufficiently often they will assist in relieving the pressure but they will not be curative.

The procedure of choice is a subtemporal decompression made through the belly of the temporal muscle. A four inch incision is made, extending from the vertix down to the zygoma, one-half inch anterior to the external auditory canal. The temporal muscle is divided in the direction of its fibres, an effort

being made not to interfere with its attachments. The epicranium is either pushed aside or cut off and a two and a half inch section of bone removed in the temporal fossa. The dura is carefully incised and later cut in a stellate manner, exposing the tempro-sphenoidal lobe, which on the right side is silent, on the left it contains the speech center and is just posterior to the arm and leg centers. With a flat spatula, the frontal and parietal region can be well explored. A rubber tissue drain should be placed at the base of the brain under the temperosphenoidal lobe. This drain should be removed in twenty-four hours. The wound is closed in the usual manner layer by layer. No effort should be made to close the dura. If there is a depressed fracture, a sub-temporal decompression should be done first, as it allows the brain to herniate away from the fracture, making it possible to elevate or remove the depressed bone without injury to the delicate cortex. If a section of bone is removed within an area not well covered by muscle and if by any chance the pressure still persists, there is likelihood of a brain hernia or fungus cerebri developing, but the combination of a subtemporal decompression with elevation of the factun, materially diminishing this possibility. It is recognized that before doing a decompressive operation, a careful neurological examination should be made with an effort to localize the pathology and an appropriate incision made to expose same. In traumatic heads localization is often difficult. In fractures of the base of the skull, an incision exposing the fracture is impractical.

The same evidence of increased intracranial pressure is often found in children receiving brain injury at birth. The injury may be demonstrated by a spastic paralysis on one or both sides, with or without altered mentality. The amount of improvement after operation depends upon the age of the child and the relative amount of brain tissue destruction. They should have the same thorough neurological examination and the indications for operation based upon the cardinal points of pressure, history of difficult or precipitated labor, early signs of cortical irritation, a mild pappellae oedema, increased intra-spinal pressure or other general signs of intracranial pressure.

SYNOPSIS

We have tried to emphasize the importance of recognizing intra-cranial pressure in cases of head injury.

First, by neurological examination.

Second, by spinal puncture.

Third, by repeated eye ground examination.

Fourth, a careful tabulation of the patient's symptoms and a close watch maintained.

We wish to further emphasize the fact that in depressed fractures and cerebral hemorrhage, the immediate indication is for the relief of intra-cranial pressure before exposing the causative pathology.

CASE REPORT OF JOHN BLANKENSHIP

John Blankenship, aged 7, white, admitted September 26, 1919. Family and previous history negative.

Present illness: Struck by a moving automobile at seven p. m. September 26, 1919. Admitted to the hospital at seven-fifteen p. m., in an unconscious condition. Pulse 130, respiration 36, several small lacerations were scattered about the skull but none of any decided importance. His pulse was taken every thirty minutes and he was carefully ob-

served for signs of intra-cranial pressure. He reacted at intervals and complained of intense headache.

Neurological examination: No facial cranial nerve involvements. Patellae reflexion somewhat exaggerated on the right side. Babinski negative, right sided Oppenheim, Hoffman reflexes positive. Repeated examination of eye grounds showed no evidence of intra-cranial pressure. Patient's pulse remained 120 or more for four days. He became very drowsy at times. X-ray examination on September 27 showed a linear fracture in the parietal region with no evidence of depressed bone. The periodical drowsiness began clearing up on September 29, the patient showing no further signs of cortical irritation. Discharged from the hospital on October 9, 1919, with instructions to return at intervals for examination.

CASE REPORT OF LESLIE SYDENSTRICKOR

Leslie Sydenstrickor, age 21, white, admitted August 22, 1919, about twelve o'clock.

Present illness: August 22, 1919, patient fell from the back of moving automobile, striking occipital region of head. Admitted to hospital a few minutes after injury in a dazed, incoherent state and unable to give his name or address. Blood was exuding from both ears and a bruise one inch in diameter was found on his right cheek a little posterior to the right molar bone. Large bruise in right scapulae region.

Patient was put to bed and kept there in head elevated position. On August 23, there was some evidence of clearing up mentally. Still unable to answer questions. Marked nystagmus. Double Babinski. Positive Oppenheim. No unequal weakness in extremities. Cranial nerves negative. Temperature 100, pulse 90. Free discharging of cerebrospinal fluid from right ear. Eye ground examination negative. On August 25, patient appeared more decidedly dull. Complains of terrific headache. A little weakness in left arm and left leg. Eye ground examination shows a beginning papula oedema as demonstrated by blurring of the discs of the nasal half. No venous tornosity. No leakage of cerebro-spinal fluid from ears. Temperature 98.2, pulse 58. A decompressive operation was immediately advised. At two o'clock on the same day a right subtemporal decompression was done. A wet odematous brain was found with marked pressure. Duration of the operation forty minutes. Patient left the operating room in good condition. On October 26, mental condition improved. Patient talks rationally. Does not complain of headache. Temperature 99, pulse 80. From this stage, convalescence was uneventful except for stitch abscess which did not retard his recovery. Patient discharged from hospital September 13, 1919, in good condition and told to report at intervals for examination.

CASE ROPORT OF CALDWELL DEAN

Caldwell Dean, age 10, admitted on October 4, 1919.

Present illness: Patient was hit by moving automobile about nine o'clock on October 4, 1919. He was brought to the hospital a few minutes later unconscious, in which condition he remained for one hour. There were several small lacerations about his head. Pulse 108, respiration 24. He remained dazed and incoherent for twenty-four hours. Repeated eye ground examinations were negative. His pulse rate remained about 100 for three days. On October 9, he developed a severe headache and his pulse rate dropped to sixty. This lasted

only a few hours. Careful neurological examination failed to reveal any evidence of intra-cranial tension. X-ray examination on October 5, failed to show any evidence of fracture.

Discharged October 15. He was directed to return at intervals for observation. Last seen on November 13. General neurological examination was negative although he had had spells of dizziness and some headache since leaving the hospital.

CASE REPORT OF SCOTT AUSTIN

Scott Austin, age 41, white, admitted September 27, with a history of having been injured one week prior.

It was stated by friends that he was found in a wood totally unconscious with a badly lacerated left ear and adjacent tissues. He was rushed to the nearest hospital and kept under treatment for one week. On September 27, when he was brought to this hospital, he was wild and delirious and generally spastic. Temperature normal, pulse 80. The lacerated ear was badly infected. Neurological examination showed a left sided Babinski, inexhaustible left ankle colonus and exaggerated patella reflexes. Eye ground examinations showed an advanced degree of choked disc worse in the left eye. Spinal puncture showed fluid under pressure. Clear and with no evidence of infection. A decompressive operation was immediately advised. On September 28, a right sub-temporal decompression was done (ordinarily a left sided decompression would have been advised but due to the infection on the left side it was thought wise to do a right sided decompression).

The dura was found tense and no pulsations were visible. Duration of the operation thirty-five minutes. September 30, patient's mental condition was decidedly better. Choked discs improved, right disc about clear. On October 2, patient's general condition good. Still improving mentally. Temperature normal, pulse 90. On October 10, mentally clear. No pathology in eyes. Left ear and adjacent tissue region still infected. October 20, infection of ear clearing up. No evidence of brain pathology. November 2, patient was discharged from hospital and directed to return at intervals for observation and dressings.

CASE REPORT OF LEWIS SAMS

Lewis Sams, colored, admitted October 25, 1919, at nine p. m., with a history of having been thrown violently from a hand car about four o'clock in the afternoon.

He regained his feet and walked about eighty yards to his destination. There suddenly he became completely paralyzed in the right arm and leg. While waiting for train to bring him to Huntington he developed a spasmodic athetoid movement of his neck and head.

Examination on admission showed a well developed boy, unconscious with a spastic paralysis of his right arm and leg. The athetoid movement of his neck and head was very violent. A paralysis of soft pallet made it very difficult for him to breathe. A neurological examination showed an exaggerated patella reflex. Abdominal and cremasteric reflexes on his right side exaggerated. Positive right sided Oppenheim. Temperature normal, pulse 70. A quarter of a grain of morphine was given and ordered to be repeated if necessary. The following morning the athetoid movements in his head and neck had ceased. He had some little use of his right arm and leg. An effort was made to do a

lumbar puncture but due to his spasticity and fright we were unable to get into his canal.

Eye ground examination showed no changes. October 27, motor control of right arm and leg better. Patient's general condition good. X-ray of head unsatisfactory due to inability of patient to keep still. On November 1 patient had another convulsion in the same athetoid movements were developed. The convulsion was again controlled by morphine. On November 12, had a very severe convulsion, again beginning on his right side with a paralysis in his arm and leg. This convulsion lasted him twenty-four hours. X-ray examination on November 14, showed a well defined outline in the left motor area. Eye ground examination still negative. Patient's pulse ranged from 60 to 76. A diagnosis of incysted hemorrhage of brain tumor in the left motor area has been made. The patient has been advised that exploratory craniotomy should be done.

ANGIONEUROTIC EDEMA.

By WALTER E. VEST, A.B., M.D., Huntington, W. Va.

Read before the Cabell County Medical Society, November 18, 1919.

CASE HISTORY

The patient, a white female, married, nativity, United States, age 32, housewife, was admitted to hospital November 5, 1919.

Chief complaint: Facial swelling, most marked in upper lip and lower eyelids.

Family history. Unimportant. No relative has been similarly affected.

Past history: Measles in childhood, mild. Scarlet fever at nine, severe attack. Patient very much swollen. Recurrent attacks of tonsilitis from childhood up to two years ago. No definite rheumatic history, but has had sundry joint pains especially when she has a "cold." Considered herself well up to the onset of present symptoms five years ago. Menses began at thirteen and have been symptom free. Miscarried at nineteen, being three months pregnant. First child at twenty, and two subsequent labors, all normal. Youngest child is four years old. Periods now normal, the last ending two weeks prior to admission. Never constipated. No history of hemorrhoids, leucorrhea or intestinal parasites. For some years past has gotten up once at night to void. Sleeps poorly. Is nervous at times. No cough or night sweats. Has noticed a gradual increase in the size of the thyroid since her first pregnancy.

Present illness: Began five years ago with giant urticaria. The attacks have come on at irregular intervals since, and have averaged about one a month. The symptoms now are those of the classic angioneurotic edema and the parts usually affected are the lips, eyelids, wrists, hands and ankles. For two years no "hives" have been noted. When attacks are on, standing causes involvement of the plantar surfaces. Swellings itch considerably. No digestive symptoms at any time. During attacks scalp has been tender and sensitive. The onset is always sudden, and usually comes on when patient has a cold, but the taking of quinine has produced a typical attack. At times the sense of taste is lost during an attack. Has tried all conceivable variations in diet without effect and has been unable to notice any

influence of diet in any way. Nervous symptoms have gradually increased. Has to clear throat considerably every morning but has no post-nasal drip. Notices palpitation of the heart at times without any definite reference to cutaneous symptoms. Anger and excitement apparently have no bearing on attacks.

Physical examination: Eyelids swollen, the lower most marked. Upper lip swollen with tendency to eversion. One nostril presents small abscess. Pupils normal. No exopthalmos. No Von Graefe. Tongue furrowed irregularly, and is free from coating. Seven dead teeth, one with a cavity. Tonsils enlarged and ragged in appearance, and liquid pus can be readily expressed from each. Thyroid is somewhat enlarged. No lymphatic glandular enlargement. Lunge are negative. Heart sounds normal. No enlargement. Flouroscopic examination of chest shows heart to be of the vertical type. No evidence of gastroptosis. Abdomen negative except for localized tenderness over McBurney's point. Vulvae essentially negative. Cervix shows slight erosion, and a moderate unilateral laceration. Reflexes normal. No tremors. Blood pressure 100-65.

Blood: Haemoglobin 85. Leucocytes 8700. Differential, Polys 63, small lymphs 35, large lymphs 1, transitionals 1.

Urinalysis: Specimen per catheter, amber, slight sediment, acid 1026, albumin negative, sugar negative, indican trace. Microscopic: Considerable squamous epithelium and an occasional pus cell. Twenty-four hour specimen, thirty ounces, acid, 1020, total acidity 26.

Stool: Negative for undigested food and ova of parasites.

Advice: Tonsillectomy and dental consultation.

Progress: On November 13 a tonsillectomy was done by Dr. C. M. Hawes. A local anesthetic was used and the operation was practically free from pain. About twelve hours later a violent "storm" set in suddenly. Giant wheals were thickly scattered over the entire surface of the body with considerable swelling of the face. Itching was intense. The patient was nauseated and vomited considerably. A burning sensation in the epigastrium was complained of, and there was burning on voiding. The skin was flushed, the pulse rapid, and a tremor was present. The blood pressure was 90-60. The usual remedies were valueless, but after two sleepless nights the condition was controlled by hypodermics of adrenalin and the local application of a weak aqueous solution of menthol and phenol. This is by far the most severe attack the patient has ever suffered. Since Saturday there has been no return of the cutaneous symptoms and a feeling of weakness is the only residue. This latter may be due to the fact that the menstrual flow began about the time that the urticaria subsided.

Discussion. Osler says that angioneurotic edema is urticaria "writ large," and the medical profession generally considers the two as only variations of the same disease process. In this case both conditions have been present at different times and in the last attack the two findings were co-existent. The interesting and baffling symptom-complex which we ordinarily call angioneurotic edema is so similar in its clinical manifestations to the phenomena associated with anaphylaxis that it would seem we are justified in considering it as being an anaphylactic reaction. Its similarity to serum sickness, various food poisonings,

bronchial asthma, hay fever, and the untoward effects at times seen after the administration of salvarsan, would tend to confirm this opinion. All these are unquestionably toxic anaphylactic phenomena, and probably the actual pathology is due to the stimulation by the toxic agent of an excessive output of thyroid secretion with probably diminution of adrenal secretion. The rapid heart, low blood pressure, flushed face, nervousness and the ease with which all anaphylactic phenomena respond to the hypodermatic use of adrenalin lend support to this view. The actual local pathology appears to be a temporary paralysis of the muscular coat of the walls of minute blood-vessels with a consequent dilation and a lymph exudate into the tissues. It is probable, too, that the toxic agent in some manner causes an increased permeability of the endothelial lining of the vessels affected.

The toxic agent may be varied. At times it is a drug, at times a food product, and again it may be a bacterial toxin. Cases are reported where it seems certain that the exciting stimulus was psychic. In the case under consideration we were of the opinion that the underlying cause was a focal infection because (1) Practically all conceivable variations of diet had been tried without effect before the patient consulted us; (2) The onset of symptoms without apparent cause other than "taking cold" which is really a bacterial invasion of the respiratory tract; (3) The presence of chronically infected tonsils and of dead teeth; and (4) The negative history as to psychic causes. That the tonsils were the probable focus of infection would seem to be indicated by (1) The history of repeated attacks of acute tonsilitis antedating and overlapping the history of the edema; and (2) The presence of liquid pus continually in these organs. The violent attack immediately following the tonsillectomy probably was due to the stirring up, so to speak, of the chronic focus, with possibly during the manipulation incident to the operation, a squeezing out into the bloodstream of the accumulated toxin. It may be likened unto the flare up in the joints in subacute rheumatism following the removal of chronic tonsils, an occurrence which probably all of us have noted. Whether the lady will recover entirely now following her operation only time can tell, but we shall watch the outcome with great interest.

Later: On December 5, 1919, this lady was feeling entirely well and had experienced no recurrence of symptoms.

DIABETES MELLITUS WITH MULTIPLE ABSCESSES, WITH REPORT OF A CASE.

By DR. O. L. PERRY, Elkins, W. Va.

Read before the B.-R.-T. Medical Society at Philippi July 15, 1919.

Quoting from a very recent text book on practice, this disease is described as a constitutional disease characterized by persistent disturbance of carbohydrates and to a less extent of fat metabolism, and that it is probably dependent on pathological changes in the Pancreas.

The disease was known to the ancients and one Aretaeus who lived during the first century of the Christian era gave a graphic description of the symptoms, part of which is as follows: "Moreover life is disgusting and painful; thirst unquenchable, and one cannot stop them either from drinking or making water.

If for a time they abstain from drinking their mouth becomes parched and their body dry, the viscera seem as if scorched up; they are affected with nausea, restlessness and a burning thirst and at no distant term they expire."

Statistics show the disease on the increase in all highly civilized urban communities. Two factors may explain this, the vastly increased consumption of sugar and the intensity of the modern pursuit of business and pleasure. The disease is more common in middle life, males more often attacked than females.

The treatment as we all know is mainly dietetic and has been elaborated by many clinicians, notably Janaway, Von Noorden, Allen and others. Their diet lists and mode of use can be found in any late text book on practice.

Among the many complications of the disease, boils and carbuncles are often mentioned, a similar affection took place in the one I wish to report except that it took in this case the form of abscesses.

The patient in this case is a male, forty-two years of age, occupation railroad brakeman.

Family history: Father died at age of sixty-four, from what was called catarrh of the stomach; mother died at age of fifty-six, from child birth. Has one sister who is still living and in good health.

He first consulted me during the winter of 1916 with symptoms that led me to examine his urine, which was found loaded with sugar. His excuse for seeing me at that time was that he was not feeling well and that he wanted to take a trip west. He was advised as to his diet and of the gravity of the disease, however he took his trip, came home and though advised to take treatment, he did not do so but kept on with his work and says he observed no diet restrictions.

He was examined again some time during the year 1917, when his urine still contained much sugar. During the month of September, 1917, he met with an accident in which he sustained a severe scalp wound, was in the hospital for nine days, wound healed without trouble and he again returned to work. On December 16, 1918, he met with another accident while coupling cars in which his right hand was so severely injured that an amputation became necessary.

After about the usual experience that such cases can expect as a result of major surgery, he made a very good recovery as far as the wound was concerned and was allowed to return home. Later he began to complain of severe pain in his left hypochrondriac region and returned to the hospital where a diagnosis of peri-nephretic abscess was made and as anything approaching further major surgery was seemingly out of the question in his case, the abscess was aspirated for a few times and the patient again allowed to return home. The patient was apparently in almost a hopeless condition at this time, having lost his appetite, inability to sleep, tormented with the symptoms of thirst, pain, etc. Had to have opiates rather freely to make him comfortable. However, the aspirations were continued from time to time till March 12, when a small incision was made resulting in the discharge of a large amount of pus. From this time on he began to develop abscesses in different parts of his body. One in muscles of left shoulder, in muscles of right leg above the knee, one in calf of same leg, one in right arm, one in muscles on

outer aspect of right leg two inches above the knee, one on left side above site of first one, then on July 3 the original abscess filled up again and a day or two later another opening had to be made there as well as one in upper part of right leg. These were abscess formations of no mean size often discharging as much as half to one pint at a time. In all there were twelve incisions made, two of which are still discharging thin pus.

After this complication became well established the sugar disappeared from the urine and up to this time has not returned.

During the early weeks of this trouble he remained in a very weak condition and no effort was made to restrict his diet, later when signs of improvement appeared and appetite returned he was denied sweets and starchy food except a small amount of bread and corn meal mush.

I find in my records that last time sugar was found in the urine was February 28, at this time it was present in large quantities as well as diacetic acid. I find according to literature on the subject that sugar often disappears when a severe complication arises.

There are several interesting features about this case, among them are his ability to continue his hard labor with no attention to a restriction of diet for so long a time, while suffering from the disease. His resistance to the effects of accident and the effects of necessary surgery. The immunity being acquired to the toxines produced by the infection shown by lessened severity of the inflammation and lengthened intervals between the appearance of the abscesses as time went on. However the end is not yet and though the patient is fairly comfortable, has gained strength, is able to sit up and help himself to a great extent, yet the affection is not yet well and the Lord only knows when it will be if it ever is.

Urinalysis July 15, shows the return of sugar, but no diacetic acid or acetone.

Announcements and Communications

Charleston, W. Va.,
December 4, 1919.

Dear Doctor:—

In our effort to control and cure venereal diseases we find that the great majority of West Virginia doctors entered the practice of medicine before the present modern methods of treatment were inaugurated and are not familiar with its technique. In fact some recent graduates confess that their instruction in this important branch of practice was not very practical.

The West Virginia Public Health Council in co-operation with the U. S. Public Health Service has decided to hold a school of instruction for the purpose of qualifying a considerable number of physicians for the successful treatment of venereal diseases and especially in the intravenous and intramuscular treatment of syphilis.

The class will be limited to fifty, and the period will cover the week from January 12 to 17, 1920. Instruction will consist of lectures, moving picture demonstrations and the treatment of clinical cases. We feel that a week of intensive training should enable the average physician to handle his cases successfully. The instruction will be free but all who come will have to pay their own expenses.

For the purpose of insuring plenty of clinical material, we will invite any physician in the state to send or bring patients who will be treated absolutely free.

If you are interested in this school, write Dr. F. F. Farnsworth, P. A. Surgeon, United States Public Health Service, at Charleston, at once, as the effort can only be made in case a sufficient number of physicians signify their intention to attend.

This letter is being sent only to physicians outside of Kanawha county.

Most sincerely yours,

F. F. FARNSWORTH,
Director Bureau Ven. Diseases.

V. T. CHURCHMAN,
Pres. Public Health Council.

S. L. JEPSON,
Commissioner of Health.

Vocational rehabilitation, similar to that now in operation for disabled soldiers and sailors, is provided for "persons disabled in industry or otherwise" in the Smith-Bankhead bill which has just passed both houses of congress.

The bill provides one million dollars yearly to enlarge the scope of the original Smith-Hughes act creating the Federal Board for Vocational Education and its recent extension to cover war cripples so as to assure the maimed victims of industrial accidents, also, the opportunity for vocational re-training into skilled occupations suited to their physical powers and restoration to useful, self-sustaining jobs.

Physicians, especially industrial physicians, employers, state workmen's compensation officials and organized labor endorsed the campaign for this protective legislation, which was aggressively led by the American Association for Labor Legislation which is also active in promoting workmen's health insurance as the next big step following the successful development of workmen's compensation laws.

"There are at present," is was pointed out in the congressional debate, "more than one hundred thousand permanently incapacitated workers in the United States, who will be benefited by this legislation, and this large army of casualties of peace is being increased at the rate of 11,500 every year."

Under the bill as passed by congress the individual states must provide at least one dollar for every dollar expended by the federal government on behalf of their own crippled workers. Several states have recently taken favorable action in anticipation of congressional cooperation now assured in the Smith-Bankhead bill.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., January, 1920.

THE JOURNAL issued on the first of each month. Entered as second-class matter. January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription - - - - - - - $2.00 per year
Single Copies - - - - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—H. R. Johnson, Fairmont.

FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

SECOND VICE-PRESIDENT—W. E. Vest, Huntington.

THIRD VICE-PRESIDENT—Joseph L. Miller, Thomas.

SECRETARY—J. Howard Anderson, Marytown.

TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

GREETINGS FOR 1920

Each year when the January issue is being made ready for the printer, it is our custom to have an hour to think of the year's work and build some "castles in the air" for our State Association and The Journal.

Some of these things have been accomplished; some of the plans have proven to be impractical; others still must have the specifications revised. Still the Association has made progress each year, don't you think? We have much to be very thankful and appreciative for. Our organization will compare very favorably with the others among the various states.

Let us not sit down in smug complacency, however, and feel that we can rest on our oars. There is much to be accomplished in this year by the State Association, if we are to continue our advance. A number of times recently we have spoken of the very great necessity for the awakening of the spirit of the County Societies.

This year is election year for members of the House of Delegates and the State

Senate. At first thought you will say, "Well, what has that to do with the State Medical Association?" It has much to do with us. At present there is an undercurrent of unrest. Things are going to be changed. A great deal of legislation is going to be proposed—good, bad and indifferent—with a great variety of subjects. Not the least among these will be Health Insurance, changes in the Workmen's Compensation Act; very likely in the act governing medical practice; certainly the legalizing of certain of the faith healers, chiropractors, etc.

These questions are vital ones to us, not only as physicians, but as citizens of the state. It is imperative that we get our organizations thoroughly aroused and closely united. If we do not we shall have none to blame but ourselves. Let us make ourselves so strong that we can be of weight in the selection of the candidates for office in both parties.

Gentlemen, united we can be irresistible for no men in the commonwealth have the influence of the physicians, if we but pull together. Let us unite that we may work for the common welfare of all the people, not selfishly to make more financial gain, but to help defeat bad legislation as well as support good measures. In the course of things we should endeavor to see that our profession is not imposed upon, as it is sometimes, I fear, because of our lack of cohesion.

To this end let us all get to work for "ONE THOUSAND PAID-UP MEMBERS" when we meet in Parkersburg in May.

May this year of 1920 be the happiest and most prosperous one for all of our members. May we feel at its close that it is the best year we have ever lived.

DUES AGAIN

Secretary Anderson just this week sent in a list of recently paid 1919 dues. We are very glad indeed to have these men pay the 1919 assessment.

But bear in mind that when this issue of The Journal reaches you the dues for 1920 will be due. The by-laws of the association state emphatically that this is so and that all members who have not paid by April first are automatically dropped from the rolls. Not only this but the postoffice department requires that they shall be cut off the mailing list of The Journal.

Then again, there is that provision in regard to suits for mal-practice. If one's dues are not paid by April first he is not entitled to defense if he should be sued subsequent to that date even if he hurried and paid his dues. Do not neglect this and then "kick" if some disgruntled fellow sues you and the Defense Committee rules you will have to go it alone.

And, County Officers, please don't forget, we are to have one thousand members when we go to Parkersburg.

Get busy! Collect 1920 dues at once and forward to Secretary Anderson promptly.

CALL TO THE COUNTY SECRETARIES

It is to be hoped that the newly elected secretaries of the local societies will enter into their duties with a full realization of the great importance of this office to the life of the organization. Upon his shoulders rests the responsibility for a live society, very largely.

In this connection attention is called to the dearth of State News in recent issues of your Journal. Many times we have spoken of this and the failure to receive reports of meetings of the County

Societies. These items are of great interest to the members over the state.

Clip items from your local papers giving changes of address, vacations, marriages, deaths and so on, among your members and mail to the editor before the tenth of each month.

The following is clipped from the monthly bulletin of the Bucks County, Pa., Medical Society. It contains much food for thought. Possibly it had never occurred to the members of our association to think about this matter.

Truly it does seem that one of the greatest drawbacks to our profession is that we do not get together more frequently and get more thoroughly acquainted. If we will do this we will find that the men are not nearly such cutthroats and general d—d rascals as we have pictured them from what we have heard.

"IS HE WORTH WHILE?

Is the non-attending member of our county society worth while? The distant living member is not included in this consideration. Is the non-attending member worth defending when he gets a mal-practice suit on hand? Is it worth while for the active members of the society who kept things going and who would be compelled to lose their good time attending court to help the fellow in trouble when that particular individual never bothered attending any of the meetings nor bringing anything good to the fellows? One courtesy deserves another. The sick or unfortunate are excepted. Twenty years ago, such actions "went." Today it is very different. The Medical Defense Fund, and other means of progress have put an entirely different construction upon the membership. If the non-attendant does not think it worth while, why should the active members make it worth while to defend him? Pay his dues? Surely, that is not the only good thing in this world. Good-fellowship is often valued above price. A physician without any joint interest or fraternal feeling is not worth a shuck, for by his own action, he makes himself a poor member. He is hardly worth while."
—*Bucks County* (Pa.) *Medical Monthly.*

News Items

OHIO VALLEY GENERAL HOSPITAL CLINICAL CONFERENCES

The organized attending staff of the Ohio Valley General Hospital of Wheeling are holding monthly conferences at the new hospital building. The clinical material is gathered from the wards of the hospital, and an abundance of pathological specimens from the laboratories. The following is the program for Tuesday evening, December 16:

1. The Relation of the Eye to Brain Tumor, Dr. Oesterling.

2. Broncoscopy Case Reports, Dr. Hoge.

3. The Tonsil in Army Life, Dr. Hildreth.

4. Swift Ellis Treatment, Dr. MacGregor.

5. Case Clinic, Hernia of Bladder, Dr. Reed; Abscess of Lung, Dr. Linsz.

6. Foreign Bodies in Digestive Tract; X-ray Demonstrations, Dr. C. H. Clovis.

7. Debridement in War and Civilian Wounds, Dr. Aikman.

Presentation of Unusual Cases, instances of difficult diagnosis and pathological material. Every member of the attending staff is expected. Visiting physicians are welcome.

Dr. I. W. Taylor, who has been located at Wayne, has moved to Huntington to practice his profession.

Dr. J. Howard Hubbard, specialist on skin diseases and urology, of Baltimore, will open an office in Huntington the first of January.

Dr. Hubbard is well known in West Virginia as he was connected with Dr. Cooper's Hospital at Hinton for two years. He served as resident physician for two years at the Baltimore Hospital. After leaving Hinton Dr. Hubbard was connected with the United States army as captain of the medical corps, serving in France. Since returning to this country his time has been spent at the Johns Hopkins hospital in Baltimore, and at the New York Skin and Cancer Hospital.

Dr. and Mrs. Edmond D. Wells and daughter, Nancy Belle, of Huntington, have gone to Louisville, where they will be guests of Mrs. Wells' parents until January. While in Louisville, Dr. Wells will take an advanced course in surgery of the ear at the University of Louisville clinic.

Dr. U. L. Dearman of Reedy, was a recent visitor in Huntington.

Dr. J. A. Guthrie and Miss Anna Trimble, nurse of Huntington, have returned from Parkersburg where they attended the fourth annual convention of the West Virginia State Hospital Association. Dr. Guthrie was unanimously re-elected the president of the body. The convention was held in the Chancellor Hotel parlors. attended by about twenty representatives of the medical and nursing profession of the state. Miss Mary Vernon, of the Parkersburg City Hospital, was re-elected the secretary-treasurer.

The next year's meeting will be held in conjunction with the annual meeting of the West Virginia State Medical Association, as it is desired to hold the meeting during one of the sessions of the latter association, which will occur next May in Parkersburg.

Dr. C. F. Taylor, editor and publisher of the *Medical World*, died November 5, 1919.

"Flying will provide the great boon sought for the treatment of all nervous cases such as neurasthenia, and even paresis," said Dr. Reginald F. Grant, after a series of tests of the effects of flying upon human beings.

With Drs. Mason W. Pressley and E. G. Goodrich, Dr. Grant conducted tests that classified the sensations received by a person on a first air ride, from "the thrill," to a "marked sense of exhilaration as though he had partaken of good champagne." The tests were made on several patients at a Los Angeles aviation field.

The therapeutic report of airplaning, Dr. Grant summarizes as follows:

"Flying increased the total volume of blood, increased the metabolism—the process of converting food into tissue—increasing lung ventilation, increased blood pressure and arterial hemoglobin, the vital element of the blood which absorbs and carries oxygen."

A PLETHORA OF GERMAN DOCTORS

After having suffered from a dearth of doctors during the war due to the demands of the army, civilian Germany now finds itself over-supplied with medical men. The Leipsic branch of the Association of Physicians of Germany

summed up the situation in a recent issue of the *Berliner klinische Wochenschrift* which states that the mal-adjustment between the supply and demand in the field of medical employment was never so great as it is at present. The inability to find work in civilian life is most keenly felt among the younger physicians, 5,800 of whom have been graduated during the years of the war. Equally grave news comes from Austria-Hungary where it is said some 700 former miliary doctors remain unemployed, after all openings have been filled, to whom may be added some 600 or 700 civilian doctors from German-Bohemia, the southern Tyrol, etc., who have been driven to German-Austria because of the creation of national governments. Altogether considerably over 1,000 doctors have been made jobless through the political happenings in German-Austria. To add to their hardships the National Constitutional Convention has approved alterations in the compulsory health insurance regulations that will practically ruin the profession according to reports. Persons who can satisfy the authorities that their earned incomes do not exceed $1,000 a year are permitted to join the scheme if they so desire. The fees which doctors receive on behalf of these assured persons worked out to not more than eight cents a visit. That there will be a rush of German practitioners to this country after the signing of the peace treaty is very certain, unless measures are taken by the authorities to refuse them a license to practice.—*Journal A. M. A.*

AMERICAN MEDICAL SCHOOL IN PARIS

The project for the establishment of the American School of Medicine in Paris took definite shape at the meeting held recently in the office of Charles F. Beach, an American lawyer in Paris. In addition to a number of laymen, Drs. Tuffier of the Academy of Medicine, Dehelly, Alexis Carrel, Edmond Bornet, and other noted physicians and surgeons of Paris were present. The new school is to be entirely post-graduate in character, and will be under the joint direction of American and French physicians. —*Journal A. M. A.*

GRADUATE MEDICAL FELLOWSHIPS FOR NEGROES

Mr. Julius Rosenwald of Chicago, is offering six fellowships to negro graduates in medicine by which they may pursue advanced studies in the fundamental medical sciences under favorable conditions. Each fellowship stipened will be $1200 to pay the students transportation to and from the institution in which he will work, as well as his laboratory and tuition fees, books and living expenses. The medical schools in which these fellowships will be available will be selected by a special committee under the direction of the General Educational Board, New York City.—*Jour. A. M. A.*

The Association of Military Surgeons of the United States, at its annual meeting held in St. Louis, October 13-15, elected the following officers: President, Lieut.-Col. Joseph A. Hall, M. C., O. N. G., Cincinnati; vice-presidents, Asst. Surg.-Gen. John W. Kerr, U. S. P. H. S., Washington, D. C.; Capt. Frank L. Pleadwell, M. C., U. S. N., Washington, D. C., and Brig.-Gen. Francis A. Winter, M. C., U. S. A., Washington, D. C., and secretary-treasurer-editor, Col. James Robb Church, M. C., U. S. A., Washington, D. C. New Orleans was selected as the place of meeting for next year, the time

set being three days immediately preceding the meeting of the American Medical Association.

The Abbott Laboratories of Chicago, have been using half page space in this Journal. Their success warrants them in using a full page at this time, and our readers will find their full page announcement in this issue. This evidence that the readers of this Journal are careful to patronize our advertisers is gratifying and is a tribute to the policy which this Journal long since adopted, of publishing in its advertising pages only such medical products as have been accepted by the Council on Pharmacy and Chemistry.

The readers have come to know that this Journal protects them; and as a consequence they may unhesitatingly purchase the products which are advertised in this publication.

In answering the Abbott advertisement each reader should use the coupon attached to the page advertisement, so this Journal will receive credit for the injuiry.

Society Proceedings

LEWIS COUNTY SOCIETY

The Lewis County Medical Society convened in regular session in the State Hospital Clinic Room, Tuesday, December 9, 1919, with M. R. Casey, M. D., president, occupying the chair.

By motion which was unanimously carried, the regular routine of business was dispensed with and the election of officers for the ensuing year was taken up with the following results:

M. D. Cure, M.D., President; J. G. Pettitt, M.D., vice-President; G. R. Post, M.D., Secretary; Geo. Snyder, M.D., Treasurer; M. R. Casey, M.D., delegate to the State Association; W. H. Green, M. D., alternate to the State Association; A. B. Collins, M. D., and F. S. Heath, M. D., members of the Board of Censors.

Those present were: Drs. M. R. Casey, C. E. White, D. P. Kessler, J. G. Pettitt, W. H. Green, J. E. Cockrean, A. B. Collins, W. P. King, M. D. Cure, F. S. Heath, B. W. Peck, E. T. W. Hall, Geo. Snyder, A. F. Lawson, G. M. Burton, S. H. Burton, G. R. Post, also H. R. Johnson of Fairmont, W. Va., president-elect of the West Virginia Medical Association.

The meeting was closed in due form, with the request that the doctors proceed to get their wives, if such there be, and meet at the Camden Hotel at two o'clock to partake of a banquet arranged for by the entertainment committee, Drs. G. M. Burton and Geo. Snyder.

At the appointed time the doctors and their wives and the doctors and their friends congregated at the dining room of the Camden Hotel where the following menu was served in the face of the high cost of living and coal shortage:

Ginger Ale

He was brave who first ate an oyster

Oyster Cocktail *Olives*
Celery Hearts *Pin Pickles*

Fruit Salad

The good (to eat) die young; the paths of glory lead but to the gravy

Roast Young Turkey *Sage Dressing*
Mashed White Potatoes *Brown Sweets*
Hot Rolls *Cranberries*

Hot Mince Pie

Brick Ice Cream *Missionary Cake*
Drip Coffee *Hot Tea*
Chocolate Mints *Cigars*

WISHING YOU A MERRY CHRISTMAS

After all had enjoyed the festivities to the utmost, Dr. J. G. Pettitt, toastmaster for the occasion, in a very able,

brief and accredited manner, introduced Dr. H. R. Johnson, who had been obtained through the efforts of Drs. Cure and Pettitt.

Dr. Johnson's talk was in line of generalizations. As he so well said, to take up a specific subject was to rehearse and reiterate something already familiar to the society. He commended the Lewis County Society for its unusual membership, laying emphasis upon the fact that every physician in the county, with the exception of one, is affiliated with the society. He pointed out the necessity of having a 100 per cent organization to meet the strenuous demands of the present and the future reconstruction periods. Furthermore he emphasized the fact that our county organization is a component of the state organization, and hoped that it would be kept up to its present high standard.

The Lewis County Medical Association extend their appreciation and thanks to Dr. Johnson for his presence and inspiring talk and also extend an invitation to be present at another such occasion in 1920.

G. R. POST, *Secy.*

CABELL COUNTY SOCIETY

Dr. Jas. R. Bloss, Editor,
West Virginia Medical Journal.

Dear Doctor:—The Cabell County Medical Society met in the Hotel Frederick Thursday evening, December 18, at 8:30 p. m.

The meeting was called to order by President C. M. Hawes.

This being the meeting for the election of officers nominations for president for the ensuing year were called for. The names of Drs. C. M. Buckner and J. C. Matthews were presented. At the conclusion of the ballot, Dr. Buckner was found to be elected. When the nominations for vice-president were called for the name of Dr. W. F. Bruns of Ceredo, was presented. Upon motion the nominations were closed and Dr. Bruns was unanimously declared to be elected.

Dr. F. A. Fitch, of Huntington, was unanimously re-elected for treasurer.

Dr. F. C. Hodges was nominated for secretary, and elected by the unanimous vote of the society.

Dr. I. C. Hicks was elected as member of the Board of Censors for the term of three years.

There being no further business the meeting was adjourned.

Fraternally yours,
R. H. PEPPER, *Secy.*

New and Nonofficial Remedies

The following remedies have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-Official Remedies:

Abbott Laboratories: Tablets Cinchophen—Abbott 7½ grains.

Calco Chemical Co.: Albutannin—Calco; Acetannin—Calco.

Cereo Company: Soy Bean Gruel Flour.

Gilliland Laboratories: Antipneumococcic Serum Combined Types I, II and III; Antistreptococcic Serum.

Hynson, Westcott & Dunning: Acriflavine (Boots); Proflavine (Boots).

Merck & Co., Albutannin Merck: Takamine Laboratory Inc.: Hirathiol.

Nonprietary Articles: Neocinchophen.

Calco Chemical Company: Neocinchophen—Calco.

Hollister-Wilson Laboratory: Pitui-

tary Solution—Hollister-Wilson; Ampules Pituitary Solution — Hollister-Wilson.

Pure Gluten Food Company: Hoyt's Gluten Special Flour.

Van Dyk and Company: Benzyl Benzoate for Therapeutic Use—Van Dyk and Company.

Winthrop Chemical Company: Luminal; Luminal Sodium; Luminal Tablets.

Yours truly,
W. A. PUCKNER, *Secy.*
Council on Pharmacy and Chemistry.

Albutannin.—Tannin Albuminate Exsiccated.—, compound of tannin and albumin, thoroughly exsiccated and containing about 50 per cent of tannic acid in combination. It was first introduced as tannalbin. The use of albutannin is based on the assumption that the tannin compound passes the stomach largely unchanged and thus the astringent action will be exercised in the intestine where the compound will be decomposed by the intestinal fluid, slowly liberating the tannic acid. Albutannin is used in diarrhea, particularly in that of children, and in phthisis.

Albutannin-Calco.—A non-proprietary brand complying with the standards for albutannin. The Calco Chemical Company, New York.

Albutannin—Merck. Merck and Company have adopted the name albutannin for the product accepted as tannin albuminate exsiccated—Merck (see supplement to New and Non-Official Remedies, 1919, p. 12) (*Jour. A. M. A.*, Nov. 1, 1919, p. 1363).

Acetannin.—Tannyl Acetate. The acetic acid ester of tannin. Acetannin was first introduced as tannigen. Acetannin is claimed to be practically non-irritant to the stomach and to pass unchanged into the intestine, there to become effective as as astringent. It is used in diarrheal affections.

Acetannin—Calco. A brand of acetannin complying with the standards of New and Non-Official Remedies. The Calco Chemical Company, New York.

Anti-Pneumococcic Serum, Combined Types I, II and III.—Gilliland. Prepared by immunizing horses with dead and living pneumococci of the three fixed types and standardized against Type I culture. Marketed in 50 Cc. gravity injecting packages and also in 50 Cc. and 100 Cc. vial packages. The Gilliland Laboratories, Ambler, Pa. (*Jour. A. M. A.*, November 8, 1919, p. 1442.)

Tablets Cinchophen—Abbott, 7½ gr. Each tablet contains 7½ grains of cinchophen—Abbott. Cinchopen was first introduced as atrophan and is in the U. S. Pharmacopeia as *Acidum phenylcinchoninicum.* The Abbott Laboratories, Chicago.

Acriflavine and Proflavine. These are dyes derived from acridine, a base found in coal tar. Their use in medicine is proposed on the claim that they have high antiseptic power, together with comparative freedom from toxic or irritant action and without inhibiting effect on the phagocytic action of leukocytes or on the healing process. They have been used as wound antiseptics, and acriflavine has also been proposed for the treatment of gonorrhea. The reports on the value of the two preparations are contradictory and conflicting. In the treatment of wounds, solutions of 1:1,000 in physiologic sodium chloride solution are commonly recommended. In gonorrhea, a strength of 1:1,000 in physiologic sodium chloride solution is used for an in-

jection into the urethra, and weaker solutions have been used for lavation.

Acriflavine. This is 3:6 diamino acridine sulphate. For a discussion of the actions, uses and dosage, see above. Acriflavine is a brownish-red, odorless, crystalline powder, soluble in less than two parts of water and in alcohol, forming dark red solutions which fluoresce on dilution. It is nearly insoluble in ether, chloroform, liquid petrolatum, fixed oils and volatile oils.

Proflavine. This is 3:6 diamino acridine sulphate. For a discussion of the actions, uses and dosage, see the preceding article, acriflavine and proflavine. Proflavine is a reddish-brown, crystalline powder. It is soluble in water and alcohol, forming brownish solutions which fluoresce on dilution. It is nearly insoluble in ether, chloroform, liquid petroleum, fixed oils and volatile oils. (*Jour. A. M. A.*, Nov. 8, 1919, p. 1443).

Pituitary Solution—Hollister-Wilson. Liquor Hypophysis. A sterilized solution of the water soluble extract of the posterior portion of pituitary glands of cattle, preserved by the addition of chlorbutanol. It is standardized according to the method of Roth and complies with the U. S. P. standard. The Hollister-Wilson Laboratories, Chicago.

Ampoules Pituitary Solution.—Hollister-Wilson 1 Cc. Each ampoule contains pituitary solution.—Hollister-Wilson 1 Cc. (*Jour. A. M. A.*, Nov. 29, 1919, p. 1699.)

Health News

A clean house with plenty of fresh air and sunshine is a long step in the direction of health.

The kitchen is the most important room in the house from a health standpoint. Keep everything about it and everyone in it scrupulously clean.

Beauty is more than skin deep. Natural beauty is usually a sign of health that comes from keeping the body clean and getting plenty of outdoor exercise.

A decayed tooth is far more dangerous than a fly in the soup. Visit the dentist regularly. Keep the teeth clean.

Thousands of children are killed every year because parents say, "They will have it anyway," and permit the little ones to expose themselves to whooping cough, measles and scarlet fever.

Industrial accidents killed 3,400 persons and seriously injured 50,000 in the state of Pennsylvania in 1918, according to reports reaching the United States Public Health Service. Most of such accidents are preventable; many the result of carelessness. Safety first.

Cultivate the habit of walking with head up and the shoulders thrown back. It is cheaper and better than bottled tonics.

Germ diseases kill off more people than the deadliest wars. In 1917 pneumonia and tuberculosis killed 223,000 Americans, more than seven times the number killed in action in France.

Heart diseases caused more deaths in 1917 than any other ailment (115,337). Right living would materially reduce this. Don't wait for the disease to develop before you see your physician.

Carelessness with the hands and teeth causes more deaths in America every year than carelessness with motor vehicles. Keep the hands clean, free from germs, away from the mouth and visit the dentist regularly.

Do not take drugs to cure the headache. Consult a physician, a dentist or an oculist, to see if the cause can be located. Often the eyes, or the teeth may be at fault.

A person can live weeks without food, days without water, but only a few minutes without air. Persons who pay but little attention to the purity of the air they breathe are not careful as to drinking water and food. Become a fresh air crank. Raise the office windows.

HEALTH QUESTIONS FOR MEDICAL MEN

Do I fully instruct patients in controlling the spread of communicable disease?

Do I stimulate the people of my community to initiate community health work?

Do I always seek to discover the underlying social and economical causes of my patient's illness?

Do I place self-interest above community welfare by failing to report communicable diseases to the health officer?

Do I strive to keep public health matters out of partisan politics?

Do I keep abreast of progress in public health?—*New Jersey Journal.*

MEDICINE

ASTHMA AS A DIGESTIVE SYMPTON-COMPLEX

The correcness of the theory of the origin of asthma as expounded in this article is confirmed by a successful practice in over three hundred cases. Asthma as at present understood, is faulty in the conception of its etiology and pathology and chaotic in the application of therapeutic media. The cause of asthma was suggested by the results obtained in the treatment of four cases of insufficientia pylori complicated by asthma. In each case the cure of the stomach condition was attended by the cure of the asthma. This led to the conclusion that there must be a certain and definite and intimate relationship between insufficientia pylori and asthma.

Insufficientia pylori is defined as nonclosure of the pylorus; the pylorus offering no resistance to the ingested food from escaping from the stomach into the intestine in an undigested condition. As the ingested food failed to undergo action by the gastric juice, the ingesta leaves the stomach unprepared for intestinal digestion. Abnormal chemical reactions with excessive gas formation takes place in the intestine and physical distension of the abdomen results. This pressure, equal of course in all directions, presses against the diaphragm and causes compression of the thoracic viscera, the heart and the lungs. The interference with the normal function of the lungs due to this great resistance results in suffering which is expressed by the symptom complex we call asthma. After the digestive disturbance was corrected the lungs were permitted to expand normally.

TREATMENT OF ERYSIPELAS

W. H. Guy (*Journal of Cutaneous Diseases*) gives his experiences in eighty cases of erysipelas. *Local applications* as follows were used from time to time:

1. Ichthyol; (a) ointment, 10, 20 and 30 per cent.; (b) aqueous solution.
2. Boric ointment, plain and with the addition of small amounts of menthol and phenol.
3. Collodion.
4. Tincture of iodin, pure and diluted.
5. Magnesium sulphate in iced aqueous solution.
6. Phenol (pure).
7. Boric acid saturated iced aqueous solution.

The *general treatment* was largely symptomatic. Liquid diet and complete rest in bed. Sponging when the temperature became excessive. Ice cap when headache severe.

A polyvalent antistreptococcic serum was used in all cases. It is a conservative estimate that 75 per cent. of the cases were favorably influenced by this serum as amelioration of symptoms was too closely connected with the administration of the serum to be explained in any other way. An abortive effect was obtained in two cases.

SERIC-SERUM FOR CONTROLLING HEMORRHAGE

Dufour and Le Hello noted that an anaphylactic reaction in a patient with hemorrhagic purpura seemed to modify the blood in such a way that the tendency to hemorrhage was arrested. This suggested that a therapeutic anaphylaxis might be induced which would arrest hemorrhages impossible to control by other means. They selected for this the method of passive anaphylaxis induced by injection of a small amount of serum from a rabbit in a state of anaphylaxis. They injected the rabbits several times at regular intervals with small doses of diphtherir antitoxin by the vein. They are bled the twenty-first day after the first injection, and their serum injected into guinea-pigs sensitizes the latter immediately, and induces manifest hypercoagulability. Injected subcutaneously in human beings, it almost ommediately induces hypercoagulability and has thus arrested hemorrhage in numerous cases. Normal rabbit serum does not seem to modify the coagulation of the blood in man. A number of cases are described in which this seric-serum against hemorrhage, as they call it, arrested grave hemophilic and other postoperative hemorrhages, severe recurring uterine hemorrhage in a young woman, and fulminating epistaxis. They declare that nothing to compare with this prompt arrest of the tendency to hemorrhage has ever been realized with other measures. The seric-serum was injected in the dose of 10 c. c. and the effect was evident in about four hours, one hour or two hours in the different cases. In none of the cases were more than two injections needed.

AUTOINTOXICATION

Dr. Cecil De J. Harbordt, Dover: A vast majority of the diseases found in childhood, outside of the eruptive fevers, are caused wholly by the retention of toxic material in the stomach or bowel. Chronic liver troubles are more often than not due to autotoxins, as are many of the more serious renal affections. The numerous forms of dyspepsia and indigestion are all caused more or less by autotoxemia. Even in cases of so-called nervous indigestion, were it not for the absorption of toxins the nerves would not

be affected sufficiently to produce the nervous phenomena causing all of the distressing symptoms of this troublesome condition. Treatment in all intestinal and stomach diseases is to clean out the entire tract thoroughly and to place the patient on a proper diet in order to avoid a reccurence of the trouble. It is one thing to clean out the alimentary canal and quite another to keep it clean and free from putrefective material. Many manufacturers, claim to have a "cure all" for digestive and fermentative troubles, but the fact remains that there is not one single drug or combination of drugs that is suitable for every case, for each case is a law unto itself, and calls for some special drug. It is often a most difficult matter to find the cause, the exact poisons that are producing the autointoxication. It may take a long study of the case and its symptoms before the seat of the trouble is found; but until one finds it and removes it, one cannot expect to effect a cure.

PHYSICIANS FORM NEW ORGANIZATION TO COMBAT HEALTH INSURANCE.

The Physicians Protective Association has been formed in Buffalo independently of the district branch of the State Association to combat health insurance in the state legislature. Dr. Earl Lathrop is the secretary-treasurer and chief organizer of the movement. A call has been issued to over one thousand physicians in western New York to join the Association, with the plea that health insurance constitutes a menace to medical men. As a result of the plan to have a symposium on health insurance at the district meeting of the state Association, several physicians who were members of the Protective Association withdrew from the program. The New York State Association has a special committee making a study of the subject of health insurance.

TREATMENT OF MORPHIN ADDICTION

Juarros comments on the constantly increasing numbers of morphin addicts, and emphasizes that treatment must be individualized, using the abrupt or the gradual method of suppressing the drug according as the patient is young, with the habit acquired within three years, the doses not over 2gm. at most, and the viscrea sound, or as the habit is of long standing and large amounts of morphin have been regularly taken. In this latter group, abrupt suspension is dangerous, especially if the patient is over 40, and has organic disease of any kind, particularly of the cardiovascular system. Strict individualization is necessary, even for the purges ordered. The lack of this responsible for the many addicts whose cases are considered beyond redemption because two or three courses of treatment have failed. Juarros reiterates that 99 per cent. can be cured without fail if the physician can refrain from imposing his favorite method of treatment on all alike, and will remember that psychotherapy is an indispensable adjuvant. He prefers Sollier's technic for rapid suspeion and Jennings' for the slow method.

TREATMENT OF BURNS BY TINCTURE OF IODIN

The use of a 10 per cent. tincture of iodin is endorsed by Mercier as a good treatment for burns of all kinds and degrees. The treatment is painful during its application and for a few minutes (four or five) following it, but as soon

as the pain so caused is over, the pain that always accompanies the burn is completely suppressed and the patient feels a complete relief. No untoward effects have been noted. The iodin is applied with a piece of absorbent cotten, soaked heavily in the tincture of iodin. Only one application is made. Mercier's experience with this treatment has been very gratifying.

URINARY TEST FOR ACIDOSIS

This test, devissd by C. Mitchell (*Medical Record*) is based upon the fact that the urine of subjects with acidosis decolorizes a watery solution of iodin. The solution is made up as follows: To 145 c.c. of water add 3c.c. of Lugol's solution 2 c.c. of a saturated solution of picric acid. This makes a clear, reddish liquid of bright color. To use, put the solution into a porcelain dish and heat over a water bath. After heating, the urine is added quickly but in small amount. In acidosis the amount of urine required to turn the color of the reagent from a bright red to a bright yellow is small, and the smaller the amount employed the worse the case. In severe cases 2 or 3 c.c. of urine will be sufficent to bring about decolorization. In cases of moderate severity 7 or 8 c.c. will show the reaction. Normal urines are not likely to show any color change under 20 c.c. unless there ns undue concentration.

BENZYL BENZOATE: THE STORY OF A PROMISING RESEARCH IN THERAPY.

So many of the procedures stil employed in present-day therapy are veiled in the mysteries of traditional effects or empiric judgments that there is fascination in the story of any drug or remedial measure that has a logical demonstration of pharmacologic potency in its history. Although the benzyl esters have been known only a short time in medicine, the possibilities of their usefulness in a rational way in certain fields of practice is becoming apparent. Benzyl benzoate has already been accepted for publication in New and Nonofficial Remedies, of the Council on Pharmacy and Chemistry. The suggestion of the applicability of the benzyl esters in therapy arose from Macht's studies of the opium alkaloids. These investigations disclosed the fact that whereas opium and its alkaloids exert their most marked effects on the central nervous system, they also have unmistakable influence on peripheral structures, notably the smooth muscle organs.

A systematic examination of the indidual opium alkaloids — the logical sequence of the observations just mentioned—demonstrated that these chemical substances can be divided into two classes: the pyridin-phenanthrene group, of which morphin is the prominent representative, and the benzyl-isoquinolin g roup, to which papeverin belongs. The former was found to stimulate contractions of unstriped muscle, whereas the papaverin-like alkaloids inhabit the contractions and lower the muscle forms.

Macht and his co-workers did not stop with the proof of these differentiating effects. The difference in chemical structure between the two antagonistic types of opium alkaloids suggested the search for simpler, non-narcotic compounds which might still act in an inhibitory manner on smooth musculature. As a result, the discovery that benzyl benzoate and benzyl acetate behave like papaverin toward the unstriped muscles was made.

The low toxicity of these drugs, com-

bined with their peculiar pharmacologic action, suggested the possibility of usefulness in conditions under which spasm of smooth muscle must be counteracted. Ureteral colic and excessive intestinal peristalsis have already been shown to yield to the tonus-lowering, antispasmodic effects of both compounds. Something of the history of the studies in this field has been recorded in a recent number of *The Journal.* In this research, the laboratory and the clinic have combined to institute a step in therapeutic progress that promises beneficient results.—*Jour. A. M. A.*, 9-6-19.

Surgery

EPIGASTRIC HERNIA

J. N. Hall, Camp Logan, Houston, Tex. (*Journal A. M. A.*, July 19, 1919), emphasizes the importance of epigastric hernia, which is not generally realized, he thinks, by physicians. There is no lack of description of the condition in the textbooks. These hernias generally occur in or near the central line, two or three inches up from the navel. An ordinary lipoma may occur here, but is more movable and not tender on pressure. Keen describes four varieties of this hernia: "1. A small mass of subperitoneal fat without any sac. 2. In addition to the subperitoneal fat a process of parietal peritoneum attached to it without any contents. 3. A sac containing omentum (omentocele). 4. A sac containing intestine." If the opening of the sac is large enough the contents may increase in coughing, but this happens in less than 10 per cent of all cases. Of the many score than Hall has seen, only half a dozen contained any portion of the bowel. The fault in the statistics is due to the failure to recognize the very small hernias, as large, say, as a shirt button. There are twenty of these to one the size of a filbert. In eighty per cent it may be, there are no symptoms, but if a bit of omentum actually comes through the orifice, symptoms are produced of pain or discomfort, a feeling of dragging, and the ulcer symptom, sour stomach, occasional nausea and even vomiting; distress after eating with periodic exacerbation of all symptoms, and even colic. Sharp pressure causes the patient to double up to escape pain, and in two or three cases Hall has noticed that an instant belching follows a touch on the hernia. The association with gastric ulcer has long been known, but is not as often recognized as it should be. No benefit would be received from operation for ulcer if the hernia were overlooked. Hall reports cases illustrating the condition, and believes that physicians should examine with special care for these hernias in every case of digestive disease. If one is found, the surgeon should be consulted as to the advisability of operation. The question arises only in a minority of cases, however. The operation is trivial in comparison with the results commonly obtained.

NEW TECHNIC FOR SUSPENSION OF KIDNEY

Penick uses the Kelly incision, approaching the kidney through the superior lumbar trigonum, only he makes the incision a little larger, if necessary. When the deep lumbar fascia is reached it is opened with a clean cut, and beginning at the lower angle of the wound a ribbon of fascia is dissected about two-thirds inch wide. The end is secured with a hemostat and laid aside for the present, and the operator proceeds to

deliver the kidney up into the wound as usual. The perirenal fat is stripped to the hilum and the capsule incised and dissected, the sutures introduced, two on each side. These sutures are caught in hemostats and laid aside while the perirenal fat is gathered by a circumferential large suture, forming a cup-shaped support under the kidney, and the ends are left long for later attachment at the lower angle of the wound in the musculature. The ribbon of fascia is now picked up and a large chromic gut suture threaded into the end to prolong it; it is then fitted around the lower pole of the kidney, just below the hilum, and a stitch securing it to the capsule of the kidney near the front is introduced to prevent slipping. The ends of the suture, prolonging the ribbon of the fascia, are left in the hemostat while the kidney is being replaced, and the sutures of the capsule are secured in the adjacent musculature, as usual in this procedure. When this stage is reached the kidney is placed in the position desired and the suture prolonging the ribbon of fascia threaded on a carrier or large needle and fixed in the muscles of the back, at the most convenient point, fitting snugly around the kidney and holding it securely while the denuded surface on the kidney forms adhesions. The large sutures in the subphrenic fat securing a support under the kidney are now drawn sufficiently taut, forming a cup-shaped support. This last procedure closes the loose space under the kidney. The wound is then closed in the usual way, layer by layer.—*New Orleans Med. and Surg. Jour.*, April, 1919.

GUNSHOT WOUNDS OF THE ABDOMEN

Experience with gunshot wounds of the abdomen is related by J. H. Gibson, Philadelphia (*Jour. A. M. A.*, July 19, 1919). While the surgery of such wounds as those of the chest and joints has made striking advances during the late war, the same cannot be said of those of the abdomen. Owing to the greater frequency of shell wounds over those of high velocity missiles, operation has been more generally practiced than was the case in the Boer war. Recoveries from abdominal gunshot wounds did undoubtedly occur in that war, but Gibson cannot say that in nineteen months' experience he saw any such. One of the most important things in the treatment of these gunshot wounds is the ability to judge whether the abdomen has been actually penetrated and what structures have been probably damaged. It is not true, according to his experience, that it is safer in any case to open the abdomen and find out. With the large number of cases one may find himself doing a needless exploratory laparotomy, or realize that the injured viscus, such as the liver, had been better left alone or that the injury was above the diaphragm and not below, and that in many cases with multiple wounds the prolonged negative exploration only added to the risk of life. If a man has a compound injury of the bones or many less severe wounds, these need attention, and one must be absolutely sure of the injury to the abdominal contents demanding first consideration. Many cases are only wounds of the wall of the abdomen, and others that seem slight may seriously involve the viscera. It is difficult to lay down general rules, and it is not so much a question of diagnosis as to whether the abdomen is to be

opened or not. It is surprising how many cases of lower chest wounds suggest an abdominal perforation, and he can recall six such cases in his personal experience. Another type of combined chest and abdominal wounds was that in which the missile penetrated the abdominal wall, perforated the liver, and lodged in the thorax. If confined to these structures, and the missile as disclosed by the roentgen ray is not large, operation should not at once be performed, but the question of injury to the bowels always came up. The probable course of the missile, as shown by its point of entrance and location, was the greatest help in such cases. The situation can be summarized by saying that with a fair degree of accurance that the hollow viscera have escaped no operation should be done. In cases of liver hemorrhage from gunshot a few patients may be saved by operation, many are not benefitted and not a few are made worse. Nature is more likely, Gibson believes, to stop bleeding from a wound of the liver than is the surgeon. If the kidney is injured as well as the liver and diaphragm, the bleeding should and can be controlled or the kidney removed. The possibly important change originating from war experience is perhaps the question of drainage. "The rule of closing the abdomen without drainage became established by our allies early in the war, and I believe is a good rule. The war has certainly shown that drainage of any wound is a frequent cause of its infection, and the discontinuance of the abdominal drain represented the application of this general rule to abdominal cases. There are, however, many cases, especially of wounds involving the large intestine and bladder, in which it would have been foolish not to drain." Gibson has noticed that many men with abdominal gunshot wounds, at first, in good condition, later became infected, and the wound had to be laid wide open. Late closure of the skin prevented infection in many cases. It is true that late infection of abdominal wounds, contrary to the behavior of chest wounds, practically never gives rise to an infection of the peritoneal cavity. The mortality from abdominal gunshot wounds was very high, largely occurring on the field from hemorrhage and shock, but it was also high at operating centers, and it was commonly observed that mortality among wounded prisoners was less than that of our own soldiers. This he attributes to the haste in operating in the case of our own men. If he is correct, the inference is obvious: "that it is a mistake to operate on gunshot wounds of the abdomen until the patient has recovered sufficiently to stand operation, unless the shock is due to hemorrhage. To determine whether the shock is due to hemorrhage was, in many cases, very difficult; but when it was not due to hemorrhage, much better operative results were obtained by waiting. All of the patients, of course, have lost a certain amount of blood; and the important question to decide is whether the bleeding is continuing." The exploratory laparotomy cannot be resorted to with the same impunity as in civil life, because wounds are usually multiple and a much longer period of anesthesia and a greater quantity of anesthetic is necessary, both increasing the immediate mortality.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER, } Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 8 HUNTINGTON, W. VA., FEBRUARY, 1920 Subscription $2.00 per Year
Single Copies 20 Cents

JOSEPH PRICE.

By A. P. Butt, M. D.,
Elkins, W. Va.

Read before the Surgical Section of the W. Va. Medical Assn., in Clarksburg, May, 1919.

One morning while watching Price's matchless work and listening to his racy original remarks I heard him say something like this:

"I see a good many Drs. here who are evidently poor, perhaps from the backwoods or cotton fields, oftimes they are without a necktie, sometimes their pants hardly meet their shoes; I care for none of these things but when I ask them something concerning Tait, Emmett, Prior or the masters of our art and they hang their heads—well I don't want such a duffer around here."

Since then I have often wondered if we paid enough attention to the history of medicine, if we paid honor where honor was due.

How infinitely small is the soul of the man who would refuse his tribute of praise to the pathfinders of our art. Sometimes I think it is intellect as well as soul.

Living as I do on the summit of the Alleghanies I see men come to our town in autos at fifty miles per hour, an occassional aeroplane passes at greater speed but the names of none of the drivers of these machines will go down in local history as will those of Meshiac Browning, the bear hunter or Porte Crayon, artist, poet, traveler, diplomat who forged their way here at perhaps a snail's pace despite the laurel, (rhododendron) swamps, forests, wild animals and starvation.

The very humblest member of this Surgical Section is capable of some form of work which will surpass that of Price or eclipse that of Gross, yet he must be content with but a local reputation, he is a follower, not a pilot, a reaper where other men have sown.

The subject of this sketch was born in the Valley of Virginia, on a plantation in Rockingham County, January first,

1853. His early schooling was received at Ft. Edward, New York and he was graduated from Union College, New York. This college was to have conferred the degree of L. L. D. upon him the day previous to his death.

After having read medicine with his brother, Mordecia, he entered the University of Pa., and was graduated therefrom in 1877.

He was married to Miss Louise Troth of Philadelphia. To this union was born seven children, three boys, four girls. During his early professional life it is said that he often became discouraged with the uncertainty of medicine and seriously considered giving up his profession.

Soon after graduation he became connected with the old Philadelphia Dispensary and founded the Gynecological and Obstetrical departments. Here among the inhabitants of the slums, in their homes, in daily contact with disease, especially those incident to vice and poverty he lived during the formative period of his life.

How oft have I heard his say " I would not give a cent for the young surgeon who has not been covered with bugs and lice while lying around tenements waiting on obstetric cases or preparing for operations. You must operate on the poor before you can operate on the rich."

Price was destined to be a free lance, fetters would not have set well and perhaps this slum stage was better suited to his talents than the more pretentious one of some large endowed hospital. One wonders what effect such a hospital appointment would have had, would it have developed or starved him? I think the latter.

His first operation was performed in the slums for Peritonitis following criminal abortion. Here was born his famous coffer dam drainage, the patient being irrigated and drained, recovery following.

Kennedy tells us that despite his slum surroundings "He attained in this work an unequaled record of one hundred sections for pelvic suppuration with but one death."

A great master of a simple technique had completely dominated his unsurgical surroundings by the most brilliant results of any age.

"From 1887 to 1894 he had charge of the Preston Retreat, during which time there was not a death from sepsis. Had his career ceased here he would nevertheless have already established an enviable record by his enthusiastic efforts to place obstetrics on an aseptic basis. His magnificent work in the Preston Retreat should not be blotted out by his exceptionally brilliant career as an abdominal surgeon."

He founded the Gynecean Hospital where he was at various times associated with several eminent Gynecologists.

In 1891 he opened his private hospital at 241 North Eighteenth Street, Philadelphia.

This is perhaps the largest hospital for purely abdominal surgery in this country. It has recently been enlarged and is being most successfully conducted by Dr. Price's friend and assistant, Dr. W. Kennedy.

Dr. Price was about five feet, seven inches in height and weighed about 175 pounds. Keen piercing gray eyes looked out from beneath shaggy eye brows, as vigorous in body as in mind.

Like all Virginians he was fond of horses and dogs, in fact all out door sports and pastimes. Because he thought it interfered with his personal cleanliness

he gave up his dogs and said he felt he should give up his horses of which he owned about one hundred.

Cleanliness was his slogan, two general baths per day and an everlasting scrubbing of face, hands and head, between times, with soap, alcohol and bichloride.

I do not think I ever saw any one whose hands would stand the amount of hard scrubbing his did.

Of his nurses he used to say that they were the cleanest in the world, no old maids, no widows, no married women, no divorced women, no bad characters, believing that women of these classes might have infected some man.

He did not make vaginal nor rectal examinations in order that he might better be able to keep his hands clean. Rubber gloves he did not use, believing them advisable for many men but not for himself owing to his extreme cleanliness.

His hospital was three stories high and had an operating room on each floor. "Four dollar operating rooms" was what he termed them. Actually I think their contents did not cost over $25.00. In each room were a couple of old bureaus, two kitchen tables, a wash stand or two, a few basins, a tea kettle and two bedroom pitchers and bowls. In fact just about what you would find in any home. There was a very small copper sterilizer which was carried from room to room and out of which he operated.

The most striking feature was the operating table. It consisted of a broad board laid on a couple of saw horses and covered with a sheet and blanket. Under the table was a zinc wash tub.

Price, of course, used this outfit as a part of his teaching equipment, to impress upon his visitors the fact that it was not necessary to have an expensive equipment in order to do good work. If the operation was a vaginal one each leg, after being properly draped, was held by an assistant, flexed upon the thigh and the thigh upon the abdomen.

Price sat upon a split bottom chair and similar chairs were placed for the rest of his visitors.

If, as was often the case, the operation was a vaginal hysterectomy we were indeed in for a treat.

To describe Price's manner of operating is for me impossible, but the one word *ease* comes close to it.

I have had the good fortune to see most of Americans great surgeons at work, rarely if ever have I seen one who did not at times hesitate, make some wrong move or do some little thing that seemed to me to be wrong. Not so with Price, every move seemed to me to be just the right one to accomplish the object intended, no lost motion, no hesitancy, not a trace of indecision. This very ease probably led him astray in urging his hearers to do operations for which they were unfitted both in training and in native ability. Claiming to have opened the abdomen over 26,000 times he failed to realize how hard it might be for his hearers to do the things that were second nature to him. Thus he used to urge us to operate for ruptured ectopic even if we had but our shoe strings to tie the bleeding vessels with. In this as in all of his talks we must take into consideration the surroundings of his hearers. At the very clinics where I heard this advice given were men from Central and South America and from Persia. If in the wilds of Persia his hearer saw a woman bleeding to death it would be eminently proper to operate and tie if need be with a shoe string but not for those of us more favorably situated.

His work was almost unvarying in its

sameness. He had worked out a technique which pleased him and then stuck to it.

He would not do slack work himself nor allow others to do it. No board of directors, no meddlesome head nurses, no disgruntled employees, no traitor assistants to fetter him. "From the coal heaver to Kennedy I can fire any of them" said he one morning.

He seemed to hardly use his eyes, the work being largely done with his fingers.

The patients were carried in and out of the operating room by two doctors and one nurse in an unvarying way: The blanket pinned around the limbs always the same way.

Is not genius an infinite capacity for taking pains?

Price used but few instruments, his regular lay-out being six haemostats, two or three small clamps, one knife, a pair of long straight scissors, straight needles. His instruments were of a special patern, light, usually made by Gemrig. Only once did I see him use as many as a dozen haemostats, this in a breast operation.

I never saw him use a retractor in the abdomen, the Trendelenberg position nor with one exception a needle holder. This was in the repair of a ruptured, practically destroyed, urethra.

He seemed to tie but very few vessels this was probably due to his accurate knowledge of the lines of cleavage.

When I knew him he was operating, prrctically everyday, upon a not large number of patients per day. I have often wondered if this did not contribute greatly to his skill.

Can the surgeon who operates two or three times per week give to his fifth, let alone his fifteenth, "case" the same amount of skill he gave to his first?

His manner of teaching was forcible and allowed of little controversy. This gave to those who did not know him well the impression of obstinacy, of dogmatism, which, while perhaps true in a measure, yet was often misunderstood.

During the last conversation I ever had with him he asked me how I had been getting along with my surgery.

I replied that the mortality rate was satisfactory but that the end results, the percentage of people who were really and permanently cured was not what I desired.

"You find it unsatisfactory at times, so do I, very, very" said he in rather a despondent tone.

He was especially fond of talking to young men. I once asked him to address the Babcock Surgical Society. "Are they young men?" was his only question. Being given an affirmative answer he readily consented. He was much interested in the career of those who had visited his clinic. How oft I have heard him say that it was one of the greatest pleasures of his life to learn of the success of those who had watched his work and thereby been able to go home and save lives, to do work they had previously been unable to do. He had the greatest admiration for men who at great sacrifice would leave home and practice to re-educate themselves.

In 1909 he suffered from an infection originating in the finger from this he never entirely recovered. For weeks it was supposed he would die. The immediate cause of his death was an infection of the retroperitoneal glands, "every gland being infected." His remarkable vitality and persistence is shown by the fact that on the day of his death, June 6th, 1911 he operated on a case of appendicitis.

He knew he was dying but commanded Kennedy to open the abdomen and put in a coffer dam. This was done. He lived a few hours thereafter his last words being: "Well Kennedy how did you get along?"

With the passing of Price may we not exclaim with Hamlet: "We n'eer shall see his like again."

One would have expected some recognition from the city in which he lived but so far none has been forthcoming. "Philadelphia would honor herself in honoring Price" said one of her leading surgeons. May we not hope that it is merely delayed.

I have thought it fitting to append the opinions concerning Price as a man and as a surgeon from some of those who knew him best and in whose judgment you will have more confidence than in mine.

With the exception of Dr. Lewis S. McMurty they are all personal letters.

Dr. McMurty says: "To justly estimate the life-work of Joseph Price and measure his influence upon the development of modern pelvic and abdominal surgery, it is necessary to consider the conditions existing back in the early eighties when he entered the surgical arena.

"At that time the principles of Lister, as evolved from the researches of Pasteur, were accepted unreservedly by only a few, while in a half-hearted way others pretended to apply those principles in practice. The epoch-making work of Lawson Tait, while laying the foundation of modern pelvic and abdominal surgery, and replacing antisepsis with asepsis, made indescribable confusion in the surgical mind by an apparent rejection of the essential principles of Lister.

"Progress at that time was materially obstructed by an unnecessary conflict between antisepsis and asepsis, when in fact the principles enunciated by Lister to the relation of microorgism to infection were the basis of every successful method of wound treatment.

"During these years the older surgeons, who occupied positions of authority, as teachers and hospital surgeons, either rejected *in toto* the new surgery, or accepted it as an experiment only.

"The great body of the profession, always disposed to follow established authority, was ready to discredit the claim of inovation and for the most part refused to accept the results of the new surgery. Not only was opposition directed against the new method of operating, but the new pathology, especially as to infections of Fallopian tubes, ovaries, and peritoneum, ectopic gestation, appendicitis, etc., was denied acceptance and reported cases were discredited. In a word, those established in authority resisted change, and the body of the profession was disposed to adhere to conservative methods in preference to what seemed most radical.

"A revolution was in progress, and, as in all periods of medical history, it was opposed by the powers in control, while maligned and abused. It was so in the days of Harvey and Jenner. When as late as in 1870 Pasteur made a visit to Von Liebig in Vienna, with the hope of demonstrating to him the marvelous results of his labors, Von Liebig, while receiving him courteously, emphatically refused to even discuss the subject with him. So it has always been, and so doubtless it will always be.

"Such were the conditions in the surgical world when Joseph Price entered upon his career. He gave his whole soul to the work. His enthusiasm was beyond

control, and he became a militant advocate of the new surgery. With the courage of Spartan, with matchless skill and judgment as an operator, he forged to the front and made an aggressive figure on every available field to establish the new surgery. It required courage; it made enemies; but with him it was a fight for science and humanity. During the years from 1885 to 1900 he was an imposing figure in the medical profession in America. He impressied the profession more by the spoken than the written word, and was a constant attendant upon the medical societies.

"He addressed county, state and national societies; and in almost every state of the Union and also in Canada he discussed the surgical problems of the day. But his teaching was most inspiring and forceful at the operating-table. His clinic was thronged for years with young, ambitious and progressive surgeons from every part of the United States.

"He stripped from surgery all complicated paraphernalia, and made its technic simple and thorough. Every prominent surgeon in the country today demonstrates in his methods the impress of this master-surgeon."

Dr. William Mayo writes:

"Dr Joseph Price was the father of abdominal surgery in America. He was a man of fine scientifict imagination and most skillful as a surgeon. The operations that he originated and the procedures that he furthered were clinically sound, and in his choice of technical methods he displayed great wisdom and accurate knowledge of pathological conditions.

Great was his work for the individual patients, his greatest work was as an educator. No American of his day left a greater imprint on sound pelvic surgery.

"Honest, kindly and conscientious, by force of character and keenness of wit he became one of the greatest surgical teachers of his time. Those who read the printed pages that he contribuaed to medical literature, valuable as they are, have no conception of the remarkable personality of this great American."

Dr. Baldy writes:

"It seems to me that the opinion of those who intimately knew Joseph Price can be but similar in general principle and can vary only as to details.

Dr. Price had an exceedingly strong and positive personality, self reliant, industrious and gifted, he built himself up in reputation and fortune from the ground against great odds. He was an untiring worker and an enthusiastic votary of surgery and in many things had rare good judgment. He was an enthusiastic teacher and carried his pupils with him, even when he was wrong, not only temporarily but permanently.

"He was a man of very strong personal likes and dislikes. When Dr. Price became prejudiced, his prejudices were unreasoning; he seemed to be governed in this respect entirely by instinct and not by judgment.

"He was combative and made many personal enemies amongst men who formerly had been his strongest friends, and this not because of the desire of his former friends to become enemies, but because of the fact that he would not allow them to remain friends.

He was a rare and unique type and the medical profession is most distinctly better for his having been a member of it.."

Dr. Robert T. Morris writes:

"My running comments on dear old Joe Price will fall short of carrying my real appreciation of him. He represented intense concentration towards any objective to a degree which is seldom seen. He carried this mental attitude into action in the perfection of detail in his surgical work.

"His convictions were as strong as those of Martin Luther or John Brown and all his powers were aimed at the fixation of his own ideas upon others. This made him a most impressive teacher. He was apparently very impatient towards any opposition from ideas which conflicted with his own and was so outspoken in his humorous irony in discussion that he made many enemies, all of whom were to be classed as having less sense of humor than he had. Beneath it all lay a solid foundation of intrepid courage, unvarying honesty of purpose, and a big, kind heart which made it impossible for him to really hold inimical feelings towards any other individual.

"I remember very well one characteristic action at a meeting of the A. M. A. He came over to my chair and said, 'See here Morris this crowd is getting sleepy. I have just spoken to Deaver. Lets all three of us disagree about something and take turns on the platform.'

"This was not an idle remark, it contained three elements. First, the idea that controversy would really set the audience to thinking and move to their feet men who really had ideas that were not being expressed; it included his sense of humor and also a fondness for sport, for he enjoyed the sport of controversy.

"Among his friends he carried a concilliatory spirit which was so elastic that he enjoyed making most amiable concessions and he was always deeply thoughtful of others.

Dr. W. W. Babcock writes:

"With the passing of Price America lost the foremost of its early masters of abdominal surgery.

"He founded no school, was affiliated with no college, published no treatise yet in his day he taught abdominal surgery as did no others of our countrymen.

"This is the paradox: Daring, I know of no new field in surgery that he invaded; original, I know of no operation that he devised; inventive, I know of no instrument that carries his name.

"But this I do know that the stimulus from Joseph Price has helped more than one surgeon to extend the domain of our art, that the inception of appliances that bear the name of others was in the fertile brain of Price and from coast to coast operators are found who confess 'I learned this method from Old Joe Price.'

"Somewhat like Tait in his intensity Price yet had a most human and lovable side. Surely the years will bring increased homage from all those privileged to see the dexterity of those old knarled fingers, to feel the power of the personality we have lost."

Dr. Howard Kelly writes:

"Dr. Price was a pioneer in the newer aggressive surgery, and a great leader and teacher of other men. He did more than any man I know to fashion the methods we pursue today.

"He realized that infection was mainly to be avoided through strict cleanliness and became an apostle of asepsis as contrasted with antisepsis.

"He was brilliant as an operator, achieving the greatest results by the simplest methods.

"He was a warm, true, devoted friend, and a most charming racy conversationalist. Simple and unpretentious, he hated all sorts of shams. I have never

known a man in our generous optomistic profession to be kinder to the poor, irrespective of race. Of Virginia stock with a background of tradition of the plantation, his heart ever went out to the colored women under his care."

TO HELL WITH SANITATION, ANYWAY.

Read before the Mercer County Medical Society, November 20, 1919.

By H. G. STEELE, M.D., Bluefield, W. Va.

After deciding to write a paper for this society, on Sanitation, I read an article by a friend of mine, Dr. C. H. Maxwell, of Morgantown, W. Va., on "Damn the Flu, Anyway," printed in the October number of the *West Virginia Medical Journal*, and I decided then that something like this, "To Hell With Sanitation, Anyway," would be a good subject for this paper.

This paper will probably not have a single suggestion that isn't familiar to most of you ,especially the physicians who have served in the World War, but it is my intention to bring before you some ideas on sanitation as they are neglected today, and as we all hope to see perfected in the near future, before we and our children contract tuberculosis or some other contagious disease before it is too late. This will merely be a conglomeration of ideas and without system or classification, but given to you as they pop into the writer's mind as he goes drifting along.

Sanitation or Public Hygiene Constitutes Both the Principles and Apparatus Employed for the Purpose of Promoting the Health of Communities.

SANITATION OF CAMPS

Before entering the army I made a visit to Camp Lee, and while there was much impressed with the splendid sanitary condition of that camp, and it been in operation but a few months. No trash was seen on the grounds, no garbage was thrown into the streets, no slops left in barrels or buckets, for flies to dabble their feet in and carry around to different parts of the camp; the windows and doors were screened to keep the flies and mosquitoes out of the barracks, dining-rooms, kitchens and latrines; the pools of water were drained to prevent breeding places for mosquitoes; the floors of the barracks and diningroom were scrubbed and kept clean; the bakeries, where thousands of loaves of bread were baked daily, were spotless; even spitting on the streets was violation of the rules of the camps. Although you well know that all the cooking of provisions at these camps was done by men, their cooking utensils, pans, plates, knives and forks were kept thoroughly clean. Their clothing was inspected every day, along with other articles about the kitchens and diningrooms, and on account of the rigid rules on venereal diseases all soldiers contaminated with such were prohibited from working in and about the kitchen and exchange. Right there a word of explanation to those who were not in the late war as to what was exchange. It was simply a little storeroom run by one or more regiments for the convenience and profit of the soldiers. In the exchange you would find chocolate, candies, chewing gum, cigars, cigarettes, pens, pencils, stationary, post cards, ink, shoe polish, brushes, little trinkets to send home to your families or sweethearts, etc., These exchange were in charge of an officer, usually a first or second lieuten-

ant, and run by a sergeant and a few privates. Each company in the regiment had a certain amount of money invested, and the profits from these exchanges were paid back to the companies in the form of dividends about every three months, or at such a time as the board of directors saw fit. Then these companies usually put this money into their mess fund, and ate it up when they so desired. Therefore, all the profits from the exchange went to the soldiers themselves and not to the government or any individual. These exchanges were screened from flies and mosquitoes and kept clean the same as all other buildings about the camp.

While at Camp Greenleaf, Georgia, in May and June, 1918, lectures and instructions on sanitation were given to us almost every day, and I know you don't want me to repeat any one of those lectures word for word, but give you some of the important things and touch on the high places here and there.

ESSENTIALS TO CAMP SANITATION.

Essentials to camp sanitation were to protect the soldiers from disease by keeping the camp in as near sanitary condition as possible. Vaccinate against typhoid fevers and smallpox; to see that the water used came from a good source, and that it was free from dangerous organisms and pollution; inspect the meats, vegetables and other foodstuffs daily, and see that soldiers were supplied with good, wholesome food; see that the windows and doors of the barracks were screened from flies and mosquitoes, and that the floors of the barracks and tents were oiled to prevent the ants from biting us and disturbing our much needed sleep, as we arose at 5:45 in the morning, drilled six hours, attended three lectures or quizzes daily, and went to bed at 9:30 every night.

We were taught how to keep down mosquitoes by draining or oiling all stagnant pools of water, where to find maggots and breeding places of flies, and how to prevent the development of the flies by destroying all refuse matter, burning manure or hauling it several miles to a farm and having it plowed under the ground; to screen all latrines and other breeding places. We were reminded of some of the diseases that can or might be prevented, such as venereal diseases, some forms of tonsillitis and diarrhoea, influenza, measles, mumps, tuberculosis, malaria, typhoid and yellow fever. How to prevent some of these diseases:

(a) Protection from bites of mosquitoes.

(b) Protection of cases from bites of mosquitoes.

(c) Destruction of adult insects.

(d) Control of their breeding places.

HOUSE FLIES.

Abundant in cattle and horseraising countries, and we well know they are plentiful where there are pig pens around and about our cities and towns. Their eggs are laid in horse manure, human excreta, manure of pigs and other animals, decaying and vegetable matter, kitchen refuse, polluted soil, etc. They lay 120 egges at once. In from eight to twenty-four hours they are hatched. In about four days they develop into maggots, then, in from five to ten days they have grown into the puppet stage. The total time from the egg to the fly is from eight to fifteen days. They have from six to seven generations during a summer, according to climate and conditions of the weather. One female fly will have from 720 to 840 off-springs in a season.

Flies transmit disease on their feet, body, vomiting liquids from their crops or feces. And a fly can carry as many as a million germs on its body. They can transmit the following: Cholera, typhoid, paratyphoid, dysentery, germs of tuberculosis, trachoma, plague, smallpox, leprosy, anthrax, ophthamia, erysipelas, and the eggs of parasitic worms. About fourteen or fifteen diseases in all.

Now isn't it important that great efforts be made to keep down the flies everywhere? Is it your duty and do you put yourself out in any way to keep them from multiplying? No. You think in your mind, "To Hell with flies anyway. Leave that to the people themselves or the health officer." And he is not paid enough to go to that trouble, so the thought goes through his mind, if he doesn't come out and say it, "To Hell with sanitation, anyway."

The flea transmits plague, and we know not how many other diseases. They lay their eggs in the hairs of their hosts (the rat). They fall to the ground, then they develop into the larva in from three to five days. Then in from five to eight days more the metamorphosis is complete. From the larva to the flea it takes from eight to thirteen days. There are three hundred species of the flea.

Diseases spread by discharges from the nose and mouth are: Tuberculosis, pneumonia, cerebrospinal fever, diphtheria, scarlet fever, measels, influenza, mumps, common colds and others.

Now do you make it your business to assist the public in educating them in the importance of preventing these diseases from being spread in this way? No, we think or say: "To Hell with these secretions, anyway."

What are some of the other ways disease are transmitted? By kissing, fingers and hands, handkerchiefs, towels, cups, toys, pencils, in water, food, soil, through the air, milk and meats.

And when stationed at Camp Sheridan for five months, later, we put into practice many of the things taught us while at Camp Greenleaf.

Now come back to Bluefield and our surrounding section: Take the ice we use, for instance. The ice plants around here are not in the best sanitary condition. Is the ice made from good pure water? Are the plants generally clean? Are the men who handle the ice clean? More than likely no. Why should they not be required to haul this ice in clean scrubbed out wagons? Why should not the men be required to wear clean clothes, and instructed to wash their hands often, or handle the ice exclusively with iron tongs? We have no inspectors. You say that it is not your business to correct these mistakes, the othere fellow says it is none of his business, and finally the health officer says, "The council doesn't pay me enough. So to Hell with clean ice, anyway."

Is the water supply about here looked after properly? The water company examines it and looks after the sanitary side the best they know how, but they don't know as much about bacteriology as the second year student in a medical college. Our water company here has a way of determining about how many colonies of bacteria are in the water, but there isn't any one of them, I would venture to say, would know a typhoid bacillus, a tubercle bacillus, a staphloccoccus, a streptococcus, or a gonococcus if they were stained with the variegated color of methylene blue, carbol-fuchsin, gention violet, and all the other colors of the rainbow and placed under a 2,000 powered microscope, where one who is familiar

with such organisms would feel like he could knock them off of the glass slide with a club.

How many so-called sanitary drinking fountains have we in this or any other city in West Virginia? The ones I can recall now are at the Norfolk and Western depot and in the high school building, and they can be improved on considerably Many uneducated people will put their lips direct on these fountains while getting a drink of water, instead of allowing the water to flow into their mouth without coming in contact with the fountain. I would suggest right here that the improved fountain be installed at these public places, where it is impossible for the lips to come in contact with the fountain while getting a drink.

What is the condition of the milk and milk dairies in and around our city and this community? Do we have an inspector to examine the cows twice a year for tuberculosis and other diseases, and is he required to make a report to the state department of health as to the sanitary condition of the milk dairies and instruct these people running the dairies what it means to keep their stables clean, how important it is to not allow any of the manure and flies to get into the milk? Are they taught how to clean out their milk bottles after they have been in many homes in the city, or are they taught the importance of boiling a bottle infected with scarlet fever germs or typhoid fever organisms, or taught how to make them safe and not endanger other lives by carrying such deadly germs back to some other homes and causing an epidemic, resulting in many fatalities, just simply because some one who knew did not tell them better but felt it not his business to inform them and simply said, "To Hell with germ free milk, anyway."

Are the glasses at the soda fountains cleaned once a day or once a week? No, they are not cleaned once a month at most of the fountains we drink from. A luitic, tubercular or convalescent typhoid drinks a soda water or dope. The glass is dabbled off in cold water, not even washed with soap and water. Some other person comes along a few minutes later and drinks from the same glass. He swallows or gets on his lips many of the germs the other person left there. Now, whose business is it to inform these soda fountain people how to sterilize these glasses or drinking cups? The doctor, who knows better, doesn't want to fall out with the proprietor, and he says, in his own mind, "To Hell with sterilized glasses, anyway." The mayor, who is the highest official of the city, says, "I don't know anything about sanitation in general," and it runs through his mind, "To Hell with sanitation, anyway."

Are the houses where scarlet and typhoid fever and diphtheria patients go out of always fumigated and made perfectly safe for other people to move into? Possibly, yes, but I venture to say, that fumigation is not always carried out where a T. B. patient moves out. And it is just as, if not more, important than the three previous ones. But many people, and some health officers, think there isn't any danger in allowing healthy persons to live in with a tubercular patient, or carrying clean ironed clothes from where a dying consumptive lives to a healthy home where there are several small children or grownups, if you want to put it that way.

Are our street cars thoroughly scrubbed and fumigated once a month, and our churches, theaters, hotels, Chamber of Commerce rooms, and depot thoroughly cleaned out once a year? Yes, once every five years. I can recall to mind one church in this city that has held

protracted meetings in it daily for as many as six and eight weeks at a time, having as many as several hundred members in the congregation at each meeting, and several of these protracted meetings have been held in this one building in the last five or six years, and I would venture to say that the carpet in that building has never been taken out and cleaned in that length of time, and I doubt very much if the building has ever been fumigated. Now, whose business is it to inform these people and members of other congregations how unsanitary their meeting places are at all times? Just think of how many tubercular and other contagious patients have been in these churches from time to time. And still, you and I, who know better, will say nothing, even to the ministers, as to how this unsanitary condition might be improved.

INSPECTION.

Are our restaurants, hotels and drug stores inspected once a month, as they should be?

Do you know the physical condition of your cook? Does she have syphilis or tuberculosis, and have you any idea in what kind of a building or hut she lives or sleeps when she is not at work? Are the dishwashers at the restaurants and hotels, the soda jerkers at the fountain, the people delivering and measuring out milk, and others of like nature, free from these germs? Who knows? Just think of a little "nigger" that crushes up the ice that goes into your milk shake or coco cola. Were his hands clean? Do his clothes look respectable and neat? How do you know, he may have gonorrhoea or syphilis? And what does he know about keeping his hands clean? Who cares? The druggist says, "Boys are hard to get. Now what do I care if he is clean or not. To Hell with this sanitary condition, anyway."

Are the meat markets and packing houses inspected of their spoiled meats and decayed vegetables and fruits? Possibly not. And the only way we people know their places are in a sanitary condition is whether these meats and vegetables are fit to eat or not. No doubt the packing houses have their sanitary men make inspections of these little stations now and again, but why should not we have our health officer inspect these places once a week or once a month and see that no spoiled meats or decayed vegetables are sold to the public.

Who should say to the friends and relatives of your patients who are suffering with an attack of scarlet fever or diphtheria that they must not ride on the street cars; that they should not go from place to place on the passenger trains, and that they are not permitted to enter public crowded buildings, such as our theatres, etc.; that they may carry these diseases and infect many persons all over town? You are afraid to inform them of these unsanitary conditions for fear they will get another physician. And the health officer says, "I am not going to bother myself about such things. The council of the city doesn't pay me enough. To Hell with sanitation, anyway."

My recommendation to improve the sanitary condition about us is, as I have heard it said, that a movement is on foot by the members of the Chamber of Commerce and the Rotary Club, to have the council of the city of Bluefield agree to pay $3,000.00 and the United States Government to pay $1,000.00 to $2,000.00 and have the government to send an army officer, specially trained in sanitation,

here to look after and train the people in this community what good sanitation means.

Now so far as the sanitary condition of our city and the county in general, it has been looked after, to my mind, splendidly for the amount of compensation received. I feel that our present health officer has done his work well for the little measly sum he receives and has gotten out of it. I "cuss" him out, and some of you have done the same thing, for the way he has handled one or more of our contagious cases, but neither you nor I would keep up the necessary office work that is required in a job of this kind for the sum of $300.00 to $600.00, or even $1,200.00 per year.

RELATIONS OF THE PHYSICIAN TO THE HOSPITAL.

Read before West Virginia Hospital Association at Clarksburg, May 19, 1919.

By J. Ross Hunter, M. D.,
Huntington.

The hospital problem in West Virginia is necessarily that of the small institution. Our state is yet in the period of active industrial development and our people have, so far, not turned their attention to the matter of hospital construction and endowment as is the case in older and more populous communities. To meet the immediate needs, certain of our enterprising physicians have erected hospitals at their own expense and are conducting them with no special moral or financial help from the community; and but for such hospitals most of our towns would suffer. These hospitals have done and are now doing excellent work. Charges have necessarily been high because an investment has been made and interest must be paid. The hope is, that these hospitals will grow in size and public confidence and that by occasional mergings and certain definiteness of policy, they will become larger factors in community life.

The problem of today is, to get behind the small hospital, co-operate with it and help raise it to the point of its maximum usefulness; and the physician's part in this development must be large, because it is to him that the public looks for advice on these matters.

If the medical work in the small hospital is limited to the owner, the relation of the outside physician to it is thereby solved, if, however, outside physicians are invited to bring and treat their patients, then a large amount of tact and mutual forbearance becomes necessary. Hospitals of this kind are usually so conducted that either a definite group of physicians compose the staff, and the medical work is limited to that staff, or the hospital is open to any and all ethical physicians. Both of these plans have some good and some bad features. It will, at once, be seen that the usefulness of any hospital must depend largely upon the close harmony and co-operation between that hospital and the physicians of the community. The question then arises, "Shall such a hospital open its doors alike to all qualified practitioners, or shall it limit the service to a special group of men?" The rule usually followed, seems to be to open the hospital to all physicians alike. This plan has the advantage of harmlessness and while the attending physician has no special interest in or responsibility for the hospital, neither has he any animosity to it. The plan has also, the advantage of popularity since the patient is thereby permitted to choose

his own physician, a thing which makes him happier though not necessarily safer. No hospital of medium size can, of course, take care in this way, of all the patients who need to come to it. It naturally follows that competitive hospitals spring up and the physician having no special responsibility anywhere, finds himself drifting from hospital to hospital, dealing first with one nursing force and then with another, sometimes two or three in a single day and as a result of this confusion, his patients are not getting as good service as they might through no fault of anybody. The hospital is at a similar disadvantage since there is endless loss of time and confusion in taking and carrying out orders from a constantly changing personnel. The hospital also, must feel the responsibility when an occasional untrained physician is working.

There are certain distinct advantages in the plan of having a regular staff. The hospital thus, has certain men to whom it may look for regular systematic patronage. It also, has the opportunity of selecting for that staff, those men whose work will add to the dignity and reputation of the hospital. The physicians work is simplified because he has his patients in one hospital where supervising nurses become familiar with his ordinary needs and the minor attentions to patients can be carried on without the necessity of finding the doctor to get an order. In this way, it is certain that both the hospital and the doctor are greatly helped; and what is vastly more important, the patient is made safer.

If such an arrangement is made between the hospital and its staff, there are certain mutual obligations. The hospital has a right to expect of its staff members, enthusiastic co-operation in all phases of its work. In securing applications for the training school and if necessary, in the teaching of nurses, in advertising the hospital and making it more popular among their various clienteel and if necessary, help in its financial difficulties; in a word, they are to be part and parcel of the hospital, helping in its adversities and sharing in its success. The hospital has also, a right to expect reasonable promptness in meeting appointments. No staff member, however busy, has a right to keep for instance, an operating room force waiting except in case of extreme emergency. Such unnecessary loss of time may demoralize the work of the hospital for an entire day. To a casual observer, the most glaring faults of the average attending doctor are the one just mentioned and a general fussiness regarding matters of trivial detail that tends to destroy the efficiency and economy of management.

What is to be the attitude of the hospital toward its staff members and what can the staff members properly expect from the hospital?

First, that his patients receive the best service the hospital is able to give them.

Second, that his identity with the hospital be announced in order that he may get the legitimate advertising that goes with such appointment.

Third, that there be no improper discrimination between the staff members.

The day of the individual doctor who treats everything is rapidly passing. In his place is coming the principal of the group and the small hospital is an ideal center for such work. If the small hospital is to succeed, it must be through the co-operation of physicians; if the physician of the future is to succeed largely, he must identify himself with and be helped by the hospital.

OCULAR LESIONS DUE TO FOCAL INFECTIONS.

By HUNTER H. MCGUIRE, M. D.,
WINCHESTER, VA.

Read Before Eastern Panhandle Medical Society.

Much has been written concerning focal infection in its relation to systemic disease. Many of our former conceptions with regard to the etiology of disease have either been materially modified or have been replaced altogether by more logical conclusions.

The intimate relationship between tonsil and sinus infections and certain types of arthritis and so-called rheumatic conditions, has been definitely proven. Dental sepsis has been shown to be responsible for a number of conditions whose etiology had either remained obscure or had been based upon erroneous conceptions. Ophthalomologists have not failed to take advantage of and profit by the newer theories, so admirably elucidated by Billings and proven by the experimental work of Rosenow.

I can well remember the time when, as a young student in ophthalmology, I was taught that iritis was due to syphilis, gonorrhoea, or rheumatism, that the various types of retinitis were either the result of specific infection or renal disease, that optic atrophy was invariably a clinical manifestzation of syphilis, that papillitis or choked disk indicated brain tumor or syphilitic gummata, and that retinal hemorrhage was only a symptom of increased arterial pressure.

So limited was our knowledge with respect to the causes of ocular disease that the mental viewpoint of the student was exceedingly contracted. His sphere of usefulness to the profession and to the public was very limited, and there was no incentive to even try to solve some of the problems of internal medicine, as he was taught that they had no relation to the disease he was called upon to treat. In fact the term specialism denoted narrowness and very deservedly so.

If the ophthalologist could successfully correct errors of refraction, if he could make a differential diagnosis between conjunctivitis, iritis and glaucoma, and could interpret certain fundus changes, if he knew the indications for the various forms of local treatment and was willing to administer Iodide of Potash in large doses, he was considered well equipped.

Happily conditions have changed. Ophthalmology is no longer a science whose teachings are confined to limited fields. Hand in hand with the great developments in internal medicine, it has not only become a more exact speciality, but one whose activities are not limited to the eye alone and whose investigations are intimately concerned with those of internal medicine.

I do not wish to create the impression that syphilis, gonorrhoea, tuberculosis, and renal conditions are unimportant factors in the production of many ocular lesions but I want to emphasize the point that many other systemic conditions, and especially focal infections, play just as important a role in such lesions as was formerly attributed to the diseases I have mentioned.

In his search for the cause of an eye lesion, the conscientious ophthalmologist of today is not satisfied to limit his investigations to any one particular field but his plan of action is to survey the entire body and by a process of elimination bring to light the responsible factor.

While it is perfectly true that many affections of the conjunctive and cornea are traceable to bacterial invasion from

outside of the body, the deeper ocular lesions, unless they are secondary manifestations of a local disease, are always due to infection from within the body.

The purpose of this paper is to bring to your attention some focal infections which are capable of producing secondary eye manifestations.

That dental disease, and particularly suppurative processes, can be productive of ocular disturbances is a fact that has been established for many years. Even older writers pointed out that a relationship existed between dental caries and certain ocular manifestations. It has remained, however, for modern observers, both in ophthalmology and odontology, to clearly define this relationship and to establish indisputable evidence of the baneful influence of dental sepsis in the production of pathologic states of the eye.

The marked development in dental X-Ray work has certainly, to a great degree, been the means by which it has been possible to demonstrate certain dental lesions whose presence would have been otherwise unsuspected and too often undetected. In most instances it is just such lesions which have been proved to be the responsible factors in the development of secondary eye conditions.

Coincident with the progress of dental reoentgenology has been the gradual recognition of the fact, on the part of dentists, that, while the ability to do good mechanical work is a desirable asset, the elimination of sepsis is the goal toward which their best efforts should be directed. This, together with a willingness to cooperate with ophthalmologists, has brought about a more exact knowledge of the subject than would have otherwise been obtainable.

In 1918 I reported to the American Ophtlamological Society twenty-five cases of ocular disease due to dental sepsis. These cases included iritis, irido-cyclitis, suppurative choroiditis, choroiditis, scleritis, parlysis of the accommodation, retinal hemorrhage, optic neuritis and optic atrophy.

It is a signficient fact that in this series the uveal tract was more frequently involved than any other part of the eye. In 18 of the 25 cases the choroid, the ciliary body and iris were the structures affected as the result of septic foci in the teeth or of reflex irritation originating in the dental region. This experience is in accord with the findings of Levy, Steinbugler and Pease in the larger series of cases reported, and is not at variance with the experience of other observers, who have thus far reported case histories.

Worth states that more than 50 per cent of cases of iritis are due to oral sepsis and kindred conditions, while B. F. Lang, out of 176 cases of iritis, found that 71 could be traced to mouth infections. William Lang reports that out of 125 cases in private patients, attributed to sepsis, 139 were traced to pyorrhoea or other dental conditions, and he likewise records the interesting fact that in this series the iris was affected 87 times, the ciliary body 79 times, and the choroid 65 times. de Schweinitz and others have emphasized the fact that general oral sepsis or extensive pyorrhoea alveolaris need not necessarily be present as the instigator of uveitis. It is pointed out that the infection is often due to a small tooth root abscess, which is not discoverable until the X-ray is employed.

The hidden element of danger lurking in so many crowned teeth can certainly be regarded as an exciting factor in many cases in which the ocular structure is involved from dental sepsis. In my cases in several instances it was apparent that crowned roots covered by bridge work

were the responsible factors in the production of the eye lesion.

The principle of building up an old root, and in many cases a septic root, is of course, essentially wrong, and it is inconceivable, in the light of our present knowledge, why this practice should be continued. Dental roentgenology will in a great measure serve to minimize this evil in the future, but until it is universally adopted the crowned tooth will continue to be one of the principle sources of focal infetion in the dental region.

As an example of it's potent influence in the production of ocular lesions may be cited the case history of a patient in this series:

A. W. W., age 38 years, a perfectly sound and healthy looking man, had been under my care for a period of four years for recurrent attacks of iritis in the left eye. The inflammatory exacerbations were always of the most severe type, being accompanied by fibrinous exudates in the anterior chamber and numerous pupillary adhesions.

The patient gave a history of an occasional attack of muscular rheumatism, but otherwise had always been healthy. Every region of his body, except the dental region, had been explored in the hope of locating the source of his infection. Syphilis, tuberculosis, and gonorrhoea were eliminated, and the nasal accessory sinuses showed no signs of involvement.

Failing to find any other responsible factor, the case was finally recorded as "rheumatic iritis," a term which has been useful in bygone days in describing a doubtful etiology. Physiologic doses of the salicylates were administered, and the usual local measures instituted. Despite very energetic treatment, the recovery was exceedingly slow, and when the eye eventually became quiet, several unyielding posterior synechiae and some pigment deposits in the pupillary space were the end results.

Each succeeding year the patient would return with a recurrence in the same eye, and each fresh attack, which was always attributed to "taking cold," left permanent damages in the ocular structures. During 1918, for the first time, an investigation was made of the dental region, despite the fact that the patient had been assured by his dentist that his mouth was free from infection.

The examination disclosed several beautifully crowned upper teeth on the side of the affected eye and the information was elicited that no X-ray examination had been undertaken either before or after the work had been done. A complete X-ray examination in this region revealed large abscesses alongside the roots of the left upper incisor and a right lower molar, both of which had been crowned.

The extraction of these teeth and drainage of the abscesses resulted in a rapid amelioration of the symptoms, and in a comparatively short period the eye was normal. A few months subsequent to this experience the patient returned with a sharp attack of iritis in the right eye, which before had never been involved. The source of infection was found in an apical abscess of a right crowned bicusped, and the inflammatory conditions likewise rapidly subsided after removal and drainage of this tooth which had not been included in the first X-ray examination and was not regarded with suspicion until the eye become involved.

While the optic nerve may be involved from focal infections in the dental region, it is more usual for this structure to be affected by suppurative processes in the nasal accessory sinuses. I have

had under my observation recently, however, a case of unilateral optic neuritis in which the source of infection could be clearly traced to a Vincent's Angina involving two lower molars and a portion of the inferior maxilla. The nerve head in this case was quite typical of the appearance one finds in brain tumor. The disk was enormously swollen and its margins entirely obliterated. The retinal veins were greatly distended and the vision was reduced to light perception. Extraction of the offending teeth and appropriate treatment of the suppurative condition in the bone has entirely relieved the inflammatory process in the nerve and the vision is now about normal.

In my investigation of dental sepsis in its relation to ocular disorders I have reached the following conclusions:

(1) Ocular lesions dependent on dental sepsis are not rare, and other factors having been eliminated, a thorough search should always be made in the dental region for focal infections.

(2) While extensive pyorrhoea alveolaris is frequently responsible for ocular disturbances, blind dental abscesses have proved to be the source of the infection in many instances in which the symptoms were first attributed to the presence of pyorrhoea.

(3) Crowned teeth are frequent offenders in the production of inflammatory states of the eye and should always be regarded with suspicion.

(4) In every investigation for focal infections in the dental region, the X-ray should include all teeth. A negative roentgenogram of simply suspected teeth is not sufficient to exclude dental sepsis.

(5) While the uveal tract is the most frequently involved ocular structure as a result of lesions in the teeth, the fact should not be lost sight of that every tissue of the eye can be affected from oral septic conditions.

(6) In the present state of our knowledge vaccine therapy in this class of cases has proved to be disappointing, and further investigations will be needed to demonstrate its value.

Sinus diseases and especially suppurative processes in the ethmoid cells and sphenoid sinuses are, undoubtedly, responsible for many secondary lesions in the eye and optic nerve.

Direct extension by continuity has been proven to be the cause of many cases of orbital periostitis and cellulitis, while more indirect invasion of the blood stream, by bacteria or their toxins emanating from a septic focus, often gives rise to secondary lesions in the deep ocular structures.

It is interesting to note in this connection, the injurious effect of these toxins in certain cases of retinal hemorrhage. The view held for many years, that increased arterial pressure, from whatever source, was the active factor in hemorrhagic retinitis, has been somewhat modified as the result of more recent studies and investigations. We not infrequently see retinal hemorrhages in patients whose arterial pressure is either normal or below normal and in these instances it has been difficult to determine what produced the break.

F. Park Lewis and others have pointed out that retinal hemorrhage is not always dependent upon the character of the blood pressure, which may be either high or low, but is due to some bacterial toxin usually given off from a focal infection, which, attacking the endothelium in the small arteries and capillaries, breaks down the tissue and the transudation of blood follows, not as a result of a too strong pressure from behind but

because of a lysis in the vessel itself.

That infected tonsils may give rise to secondary eye lesions is without question. Numerous cases have been reported in which the removal of such tonsils have either checked an inflammatory process in the eye or have restored lost vision.

It is not the usual hypertrophied tonsil which we see in children that causes the damage, but the dirty, stinking, little fellow lying deep in the tonsillar fossa, bound down by extensive adhesions, and from whose crypts may be expressed cheesy material or pus.

I have in mind now a recent case of chorio-retinitis in a young boy which failed to respond to any treatment until two badly infected tonsila were enucleated.

In conclusion I want to call your attention to those ocular lesions which have their origin from focal infections in more remote parts of the body. de Schweinitz has for many years emphasized the relationship between auto intoxication of the intestinal tract and certain types of uveitis. He lays special stress upon the fact that bacterial toxins set free from intestinal organisms appear to have a selective affinity for the uveal tissue and his contentions have been proven in a number of clinical cases.

George Huston Bell, in a recent paper, before the Ophthalmic Section of the A. M. A. calls attention to the relationship between diseases of the eye and intestinal toxemias, and dwells particularly on certain eye lesions which have resulted from putrefactive processes in the intestines due to the ingestion of an excessive amount of sugar.

While ocular lesions may be the result of focal infections originating in the appendix, these cases have either been exceedingly rare or else this source of infection has been overlooked. A few cases have, however, been recorded in which the origin of the ocular disease could be traced to the appendix.

In my private practice I have been fortunate enough to see one case of this character and it presented so many interesting features that it seems worth recording.

The patient was a girl of 16 who consulted me during the early part of 1918, and who had up to that period of her life, experienced no trouble with her eyes. A week previous to her visit she waked up one morning to find the vision of her right eye very much impaired. She first consulted her family physician, who made a diagnosis of iritis and prescribed atropine and hot compresses. As the condition grew rapidly worse she was referred to me.

The eye showed marked ciliary congestion, pupil semi-dilated, numerous deposits in Descemets membrane and the vitreous contained dense masses of infiltrates. The tension was high and the vision was reduced to perception of light. The whole picture was typically characteristic of those very acute types of uveitis we sometimes encounter.

Her general history gave no clue whatever as to the origin of the inflammatory condition in the eye. In the hope of locating the source of the infection she was subjected to every known diagnostic test. The Wasserman and the tuberculin reactions were negative, X-ray pictures of the sinuses and the teeth showed no signs of involvement, the tonsils and thyroid glands were normal, and the urinary secretions and the stools were unaffected.

The eye continued to grow worse de-

spite the fact that both local and constitutional measures were pushed to the limit.

After two months of entirely ineffectual treatment, the patient, on the occasion of one of her visits, for the first time, gave me the very interesting information that on the night she lost her vision she had had a sharp attack of pain in the right iliac region. She further stated that during the two months the eye had been under observation, she had experienced several attacks of pain in the right side of the abdomen. A physical examination was made by her family physician, who made a tentative diagnosis of chronic appendicitis.

After much persuasion on my part, she consented to operation. The surgeon who performed the operation found an appendix filled with pus and almost ready to perforate. A few days following the operation, the patient volunteered the information, that the vision of the eye had markedly improved.

From this time on careful observations of the eye were made every few days and each succeeding examination gave evidence that the inflammatory process was rapidly subsiding. In six weeks the vision was normal and all evidences of inflammation had disappeared. A recent letter from the patient states that the eye is still in good condition and that she uses it with absolute comfort.

The study of focal infections in their relationship to ocular disease, has been not only deeply interesting, but has shed a new light on certain ophthalmological problems, whose solution, up to a few years ago, was exceedingly difficult. We must remember, however, that, in the enthusiasm of the moment, we are sometimes apt to draw conclusions which may undergo extensive alteration after more mature deliberation and must bear in mind the injunction so admirably expressed by the late Dr. Herman Knapp, that we cannot reach a satisfactory conclusion on any subject until its "boom" has subsided.

We must admit that the "boom" has not quite subsided but at the same time, sufficient evidence has been submitted, in my opinion, to justify the conclusion that focal infections play an important part in the development of certain eye lesions and we are now able to make logical deductions as to their influence.

THE PRINCIPLES PRELIMINARY TO THE TREATMENT OF FUNCTIONAL NERVOUS DISORDER, WITH ILLUSTRATIONS

DR. TOM A. WILLIAMS
Washington, D. C.
M. Soc. of Neurolog. of Paris, Etc., Neurologist of Freedman's Hospital.

It is really not difficult to differentiate functional disturbance from organic disturbance if one has trained one-self in that particular sphere of diagnosis; in such a way, for instance as has been done by Babinski, who has devoted his life to the elaboration of signs distinguishing one disturbance from the other. My experience shows me that the average practitioner, even the good internist, is far too prone to diagnose hysteria without a proper neurological examination in many cases which are not hysterical at all. On the other hand, innumerable cases of all kinds of hysteria are overlooked because there is some organic condition regarded as accountable for the whole syndrome, whereas the main part of the disability of the patient is hysteria. When the hysteria is removed the patient is to all intents and purposes capable of carrying on useful

function in life, although afflicted by a condition which we call an organic disease. The disability is then not due to organic disease at all, but to hysteria. Hysteria will not be alluded to in a light fashion as is the custom if we will think upon it as a process, a dynamic occurrence in the mind, an attitude of mind, a way of thinking, a way of acting beyond the will of the patient with the information he has. I look upon it as something real to be dealt with, something that the patient cannot meet unless helped. We also look upon it as being a "conditional" reaction, one which we can modify by changing the patient's attitude. Masturbation has been alleged as the cause very frequently of hysteria. But nearly always then is the patient's attitude toward the fact that he has masturbated. It is that which produces the anxiety condition.

The preoccupation fastens itself as a rule upon some disease or disorder which is supposed to be of medical or surgical kind. But there are many other disorders which never reach the doctor because they do not wear a medical aspect. For anxiety takes also another form, a purely moral form, a failure in adjustment to circumstances. These are the cases seen by the psychiatrist or neurologist, although many of them escape even him. The patient then is not sick because he masturbates, but he masturbates because he is sick. He does so because there is a sense of craving which he seeks to satisfy in that way; it is only one of many ways.

Other ways are in drinking, violent exercise, wild amusements, going from place to place, or intense application to work. All of these are methods of satisfying the condition of craving which occurs in certain temperaments. The anxiety too is often due to its combination with some physical disturbance. This is often unfortunately exaggerated by unwise and unskilled meddling of medical men who, not understanding the symptoms and not realizing that the conditions is due merely to a psychological attitude of the patient, speak of it before the patient as of some serious physical disturbance. The treating of that physical disturbance only exaggerates its import in the mind of the patient.

The treatment of the case should consist in making a correct estimation of what is taking place in the patient's system, including his mind, and then enable the patient to grasp and understand what is taking place. This is done, not by directly telling the patient what is taking place, but by entering into his way of thinking by a series of indirect questions and getting the patient to reveal himself to you. In this way you lead him out of the situation so that he sees himself truly and ceases to have about himself notions which are morbid and has instead appreciations about himself which are true. Some patients do not wish to do this and they then must be persuaded by various devices which are part of the art of psychotherapy.

Some Military Examples

Leduc, Eugene, aged 35 years, of the 205th regiment of infantry, was suffering from stiff right hand, consequent upon a bullet in the forearm which fractured the ulna. He was wounded on the 18th day of October, 1914. Between that date and the 20th of October, 1917, he was sent from one hospital to another with one interval of temporary discharge occupying twelve months.

Finally from Caen he was sent to the Neurological centre at Besancon and later entered Salins.

History of the Wound

Fracture of the ulna by a bullet in the lower third. A long period of suppuration and immobilisation. The hand in the meantime became stiff in spite of prompt mechanotherapy. He had made no improvement whatever during his period of discharge.

When he entered, his right hand was stiff. The fingers were in extension and abduction, especially the little finger. The attitude of the thumb was normal and also its movements.

Passive movements: The fingers could not attain to complete flexion because of articular stiffness and crackling, and contracture of the exteriors.

Active movements: Nil. The electric reactions were normal. The styloradial, tricipital and ideomuscular reflexes were normal. Slight hyper-reflectivity of the small muscles of the hand, without a slowness of response to shock. Notable atrophy of the right upper member.

Physiopathic disturbances: Pallor of the skin, cyanosis when the patient lowered his hand. Hypothermia. The dorsal folds of the fingers were effaced. The nails were hippocratic, hard and brittle. The hair on the back of the hand had become scanty, but on the contrary, there was hypertrichosis on the right forearm.

Psychical state: Considerable emotivity. Wept when his children were mentioned.

Arterial oscillations: Sound hand 3. Affected hand 1.5. After 20 minutes of treatment, rapid flexion of the fingers was obtained towards the palm of the hand—almost a closing of the fist.

Arterial oscillations: Sound hand 3. Affected hand 2.¾. Normal separation of the fingers.

Case 2. In this case the mechanism was one of pure suggestion, as the wound which existed did not directly affect the extensors, for it was in the flexor region, as the accompanying photograph clearly shows. (See Figs. 1 and 2.)

Case 3. Still farther removal from the first mechanism is the next case, where the wound was in the metacarpus. It is possible that reflex inhibitious had been responsible in the first place for part of this patient's inability, but the complete immobility was psychogenetic. (See Figs. 3 and 4.)

Case 4. Similarly it is very doubtful that anything but a psychogenetic mechanism was responsible for the disability of the arm in this man, where there existed only a flesh wound of the shoulder. (See Figs. 5 and 6.)

Hyperthyroidism Simulated by Agarophobia Combined With Claustrophobia. Cured by Psychotherapy in One Week.

A woman of thirty-three came to me because I cured her sister who had been sent to me by Dr. Reichelderfer on account of intense migraine, and consulted me because of her inability, unless accompanied, to cross a wide street or to remain in a church or theatre, without an intense emotional disturbance, showing itself as palpitation, polypnoea, facial pallor, chilliness, moisture and cyanosis of the extremities, rigidity and pain in the neck and back, nausea, the sensation of great weakness and dizziness, which had lasted for eight years.

Examination showed no physical disease, the only signs present being myopia, rather prominent eyes, slight fine tremor, excessive sweating and an enlarged thyroid, instability of the pulse rate and of the blood-pressure. The lat-

Fig. 1—Hysterical drop wrist treatment after wound of ulnar region.

Fig. 2—The result of rational persuasion.

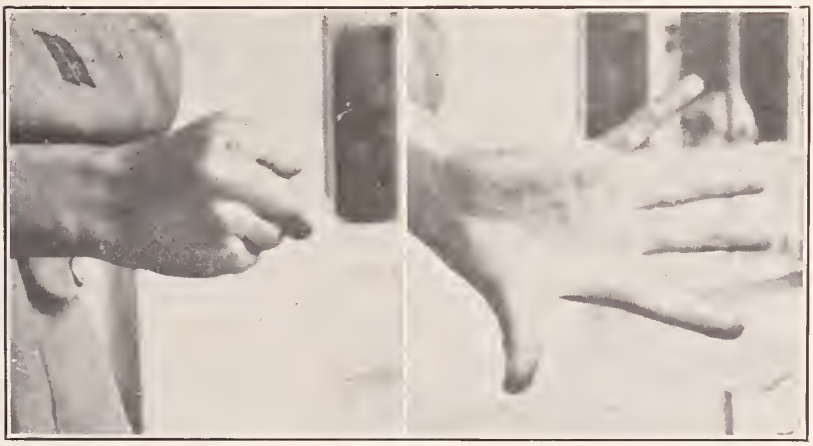

Fig. 3—Hysterical contracture of the hand before treatment after a wound of the meta-carpo phalangeal region only.

Fig. 4—The result of rational persuasion.

Fig. 5—Complete right brachial mono-plegia after wound of scapular region.

Fig. 6—The rapid result of rational persuasion.

From the Military Surgeon

These are very fully gone into in a forthcoming book, "Disorders of the Nervous System in Warfare. See also Management of Besetting Fears, International Clinic, 1919, Vol. IV.

ter at the first examination was 160 systolic, 100 diastolic, while the next day it had reached only 140 and quickly fell to 127 systolic and 85 diastolic, which I regarded as her normal pressure. The pulse rate which had at first been 112 per minute, later was found to be 97, and as reported to me habitually less than 80.

The patient declared that while outside she was never able to relax, and had lately been becoming apprehensive even in the house, and had also felt very weak in the evenings, when her heart would often flutter apprehensively.

It is not because she dreads an accident that she cannot cross the street alone, but because she fears losing consciousness on account of the heavy sensation of oppression which she experiences.

She was asked to recall the first occasion upon which she had experineced those sensations. After some effort she was able to recall that in church eight years before, on a hot summer day, she had begun to feel an overwhelming sense of illness during the sermon. The compulsion to leave the church was intense, but she was ashamed to do so as she sat near the front well back in the pew and did not wish to excite attention by creating a disturbance. She had not been ill at the time, indeed, was an exceptionally strong girl, had had no worries, and the subject of the sermon caused no painful impression upon her. No attack recurred for some weeks. At the end of that time another attack did occur, and gradually she began to experience these incommoding symptoms either at church or in the theatre, and she was only able to avoid them by sitting near the door so that she could get out immediately when she began to feel oppressed. About four years later she began to fear crossing a wide space, and felt the need of someone to support her.

She had always had a fear of high places, but had thought nothing of it, as everyone else in the family felt the same way. She had never feared the dark, and she had had no social timidities, and had enjoyed her school and college life. She had always been anxious about the health of her mother who was an invalid, but did not reproach herself for this as she had always attended to her. As a girl, however, she had been timid about appearing conspicuous, as in recitations in class.

A series of association tests were made, but revealed no morbid affects except when direct leading words were used such as "Pavement."

Further interrogation brought out the fact that it had been a very hot day when the first attack had occurred, in a small, ill-ventilated country church, and that she had really experienced a physical oppression which was antecedent to the moral distress at the possibilities which she imagined.

It was concluded, therefore, that the hyperthyroidism evidenced by the size of the gland, the hyperhydrosis, the prominence of the eye-balls, slight tremor, tachycardia and mobility of the pulse and blood-pressure was not the most important feature of the case, and might indeed, be a condition secondary to the chronic emotional strain to which she was subjected, and that it might disappear if this were alleviated. Further, it was believed that hyperthyroidism could not be responsible for the emotions of the patient, for the psychic reaction was so specifically contingent upon definite circumstances, whereas the hyperemotivity of hyperthyroidism is occasioned by numerous circumstances, and does not tend to fix itself upon only a particular event.

It was therefore concluded that both

the agoraphobia and the claustrophobia which this patient experienced were hysterical notions arising from the powerful suggestion of the recollection of a particular experience which was efficacious now only by intermediary of the timorous imagination of the patient.

Accordingly, re-education was forthwith begun. The patient was at first unwilling to undertake it after my explanation, giving the excuse that she had never been willing to introspect, but she accepted the necessity of doing so when it was explained that a person was under an obligation to know himself and that it is as futile to oppose this need as it would be to object to understanding technique if one were learning to play the piano.

It was explained to her that her dread of what might happen in a close or open place was merely due to her own ignorance of the mechanism of the consequences of a wrong way of looking at things and the emotions brought about thereby and that only when she obtained a true insight into her own psychological machinery would she be able to control it. The power of induced ideas and the feelings produced thereby were explained to her and illustrated by the story of a play called "The Harvest Moon," in which a hard-headed lawyer was made sick by the means of a few words skilfully implanted.

After a while she accepted my explanation and added: "It must have been fear, because on leaving the church, one of the maids said, 'What frightened you'?"

She stated that she was relieved after the relation of her feelings to me because her sister had maintained that she had been wrong in showing too much sympathy for the patient's affliction. She added, too, that she was naturally "such a self-contained person."

(Continued in March Issue.)

Announcements and Communications

RESOLUTIONS

The following resolutions were adopted by the Eastern Panhandle Medical Society at its meeting at Harpers Ferry, on December 10th, 1919.

WHEREAS, As it has pleased Almighty God, the Ruler of the Universe, and the Arbiter of Men's lives and actions to remove our professional brother, Doctor Richard E. Venning, from a field of service and sacrifice to one of rest and fellowship, therefore, be it

Resolved, First: That we can testify personally and as Members of this Society to the value of his service to the profession and to humanity; and his efforts at all times to uphold the dignity of the profession and the honor of his calling; to his skill as an Operator; his courtesy as a consultant; his optimism as to his patients welfare; his alertness of mind and quickness of decision; his intuitive as well as his reasoning method of making a diagnosis; his readiness to yield obedience to the demands of society and the State; to his "unfeigned piety" and to his white life and clean hands.

RESOLVED, Second: That we extend our sympathy and good wishes to the family of the deceased, and that a copy of these resolutions be sent them, also that they be published in the West Virginia State Medical Journal and in the newspapers of the Country.

Respectfully Submitted,

C. C. JOHNSON, Pres.

A. B. EAGLE, Sec'y

December 24, 1919.

Dear Doctor:—

At a called meeting, held at Montgomery on the 20th inst., it was unanimously decided that we at once effect an organization of *all* the Contract Physicians of Kanawha Field and make a concerted move to raise our fees which are the lowest in this State.

To insure the effectiveness of our efforts, it is essential that *all* join in the movement. We do not desire an alliance with any faction in the coal field and shall address our demands to Operators and Miners alike.

You will find enclosed herewith *three sheets;* one is an explanation to Miners and Operators of the reasons for our demands and the other two sheets contain the demands but with a different fee system on each sheet.

The fee system is so arranged that there may, or may not, be an extra charge for labor cases, as each Doctor or his patrons may prefer. (For two years, I have had the larger check-off, without any extra charge for Obstetrics and find it much more profitable.)

Please sign your name and address to the one (only) "Demands" sheet containing the check-off system you prefer and return that one sheet to me at once.

If you are already being better paid than these "Demands", write me to that effect, but sign and return the one sheet anyway, in order to join the movement, for this is simply a minimum and your present scale need not be effected.

Fraternally yours,

S. M. STONE,
Acting Secretary.

December 24, 1919.

To the Miners and Operators of Kanawha Field.

Gentlemen:—

Your Physicians have organized and, for the first time, come to you for collective bargaining.

Marked changes have transpired during the past few years and finding ourselves surrounded by organizations of capital and labor, it no longer behooves us to stand alone.

Our organization has been effected for just two purposes: First—that we may render better services to those whom we serve, and Second— to obtain for us a fair renumeration for our services but not to offer protection to any within our ranks who cannot, or will not, do his duty.

For a generation, there has been little change in fees of the contract Physicians of Kanawha Field and we are the lowest paid in the State, notwithstanding the fact that we have been eye-witnesses to the meteoric rise of wages and commodities of all kinds .

We, too, are sadly cognizant of the fact that the Dollar of five years ago has depreciated one-half in buying capacity and the rates we now demand have been computed from our old fees, with added increases in comparison to those received during this period by other Organized Workers.

We do not desire to inflict undue hardships but must remind you of the growing scarcity of Physicians because the cost, in time and money, of a Medical education are not justified by the returns from practice.

Other lines of endeavor offer great inducements to the young man of today

and he wisely avoids the slavish life of a Physician whose work-shift has no limit.

To those who think our profession a lucrative one, we ask, "Do you know any Physician made rich by the income from his practice?" The few rich ones have become so in other lines of business or through fortunate speculation.

Demands

First—The same prices now being paid to contract Physicians in the New River Coal Field, as follows: One dollar per month from single men; One dollar and Seventy-five cents per month from married men and Ten dollars for each labor case.

The above named sums to be collected by Companies as *First Charge* from each employee receiving a man's wages, regardless of overdrafts etc. which are beyond our control.

Second—That the companies shall not discount the above collections or otherwise charge the Physicians for making same; nor shall there be any division of check-off between rival physicians at any Operation. (The courts have held that, in case the Company receives a portion of such collections, it is the employer and responsible for all actions against the Physician who is its Agent.)

Third—That for each and every full-time contract Physician, the Companies shall provide a suitable office with water and heating arrangements, so that efficient services may be rendered. Sufficient rent to pay interest on cost of building may be charged against Physician.

Fourth,—In consideration of above terms, the Physician agrees to furnish all pharmaceuticals, instruments, dressings, and equipment for office, which does not include antitoxins or biological products. The Physician will continue to make moderate extra charge for venereal cases because outsiders could come in on him any time and secure almost free treatment by merely getting their names on pay-roll.

Signed....., M. D.

Address.....

Doctor J. R. Bloss,
Huntington, W. Va.

The inclosed letter will explain itself.

I was about to get soaked for $12.00 but as I went about it the right way I am now in the twelve.

You might want to make some comment and say it in the Journal and in this way prevent some of our other practitioners from losing some money in the future.

Yours fraternally,
H. G. STEELE.

TO THE MEDICAL PROFESSION

Dear Doctor:—

"JUNO" Extracts of Rye Whiskey, French Brandy, and Holland Gin are concentrated preparations prepared solely for the Physician to be dispensed or prescribed to patients for medicinal purposes.

These concentrated extracts give to the finished preparation both the Physical and Thereapeutic properties of the best Whiskey, Brandy or Gin. While these preparations, when compounded, are not Whiskey, Brandy or Gin, as defined by the U. S. P., they possess all of the properties of any of the above named spirits and if not known to be made extemporaneously they would never be doubted as of the best distilled products, and of an old age.

The time consumed in making the finished product is almost nil, as all that is required is to pour the ingredi-

ents into a quart bottle or measure and shake, and the preparation is ready for immediate use.

These Concentrated Extracts are sold to Physicians, Surgeons, Dentists, Veterinaries, Pharmacists and Hospitals direct. All shipping charges prepaid anywhere in United States.

JUNO Extracts are shipped in dozen lots or more, never less (we do not send samples).

The Rye Whiskey and Holland Gin Extracts at $12.00 per dozen; the French Brandy Extract at $18.00 per dozen; each bottle makes a quart; the dozen bottles makes 3 gallons. Full directions are sent with each order.

Free Goods—Trial Offer

For a limited time only, we offer the following free goods:

With 1 doz. Concentrated Extract Rye Whiskey or Concentrated Holland Gin at $12.00, 1 bottle Concentrated Brandy Free.

With 1 doz. Concentrated Extract French Brandy at $18.00, per doz. 1 bottle Concentrated Extract Rye Whiskey and 1 bottle Concentrated Extract Holland Gin Free.

Order now, as we reserve the right to discontinue Free Goods Offer at any time without notice.

All orders must be accompanied by New York Exchange, certified check, P. O. Money Order or Express Money Order. No order sent C. O. D.

We guarantee you to be satisfied in every particular. Your trial order of a dozen will receive prompt attention.

Yours truly,

KASAX CHEMICAL COMPANY.

MONDAY

Dear Doctor:—

Received your letter was indeed glad to hear from you. In reference to the enclosed I tried to locate these people but there was nothing doing. They are not listed in the phone book or the city directory, and as you can see they do not give the street address on the circular letter.

Wishing you a Happy and Prosperous New Year. I remain.

Very truly yours,

WM. RIES.

The following letter is sent to me by Dr. Steele and is published because it shows what work a man can do with meager equipment. How the Soul of Dr. Butt's old teacher, Dr. Joseph Price, must glory in the work of Dr. Smith, and in his courage.—Editor.

Rio Benito,

Sept. 25th, 1919.

Capt. H. G. Steele,
Bluefield, West Va.

Dear Doctor:—

How time flies, but letters seem to tarry—yours of 1918 spent near a year in transit—and was a little old, but it told of a friend and brother who had not forgotten me even in the mad rush. I am glad you could do your bit in the great fight but I could not get away. I was vexed at first but later I felt it was God's will to have me here—so I just tried to forget it all and do my work here. The man I relieved went home on a furlough and then enlisted and is now in service in the Philippines.

Many of my class-mates went down in the great struggle, and some of them sleep in "Flander Field."

Now doctor you do not know smallpox here, where there are no nurses, no laws, no possibility of quarantine and where vaccination is impossible and this is the home of such a disease.

Oh, how I wish I had you here many times. I have no help, not even a nurse. A few times I called the minister to give my anaesthetics but not over 8 times out of 780 operations (up to date). Now I average 1000 cases a month. Last April I had 1147 with 47 operations (27 major) and August past was a bit low with 917 and 37 operations, was short of medicines too.

Well, I have done everything that come my way—amputations, tumors, cataracts, pterygiae, hydroceles (largest one 4½ liters of water) herniae, and often strangulated, bowel resection with anastomosis, closing faecal fistulae, fibroid and hysterectomies, two bladder tumors, etc. My hard ones are strangulated herniae with bowel resections. Have done seven, all are well; then this is a type of case that is the result of strangulated hernia that putrifies and sloughs out the abdomen and the bowels discharge through the abdominal wall. They are very troublesome. I only have two Murphy buttons and once they were both in use and two patients were waiting for the buttons.

Now, here is a good story. I fixed up one old man and the time they usually pass the button is from 12 to 20 days. I had not told him yet to watch for the button. Well, on the ninth day I had a hurried call to his bed; he was so excited he could only stammer and point to his belly. Well I was sure his bowel had broken and I had a mental picture of an emergency operation at midnight but I calmed him and assured him that he was O. K., and then to my great surprise he reached under his bed and drew out a leaf and began to unroll and out came my Murphy button. Gee, I almost collapsed I felt so good. He held it up in a very excited way, "What is it? Where did it come from? Is it my heart? Am I going to die? I am an old man and have seen many things but I have never seen anything like this come from a man." Well, I thought I would burst my sides for a minute before I could tell him. I did one awful operation on a tumor of the scrotum. I removed a 57 Kilo. (Kilogram—2.68 lbs. troy) man from a 60 Kilo. tumor. Now what do you think? The tumor weighing 3 Kiles. more than the man. Twenty days later he started home on foot, 80 miles.

Now, here is another story: Just to show you how intelligent my assistant is, I had the patient on the table and the tumor looked like a barrel. My boy came to me much worried. I said, "Mbulu what the palave." He said, "Oh Massy, I sabe you fit do derri cut plaver proper—dat no tiny, but wot I no sabe—how I go git derra tiny fur

table down, when you derr finish derre cut, dat wat vex me." Yet that is the help I have to aid me in these strenuous tasks. And imagine me doing a 20 pound Fibroma and hysterectomy with such a boy as that to help me and a hospital patient who is no wiser giving the chloroform. Now how would you like to tackle such a job? Not a nurse, not even a sterilizer. Just boil up my old rags (shirts, etc.) in a kettle, shut the house, sprinkle the walls and floors, kill the flies and go to work; yet I have had wonderful results. And out of all my operative cases only six have died, two of P. O. pneumonia, due to gripp (flu), one died of apoplexy seven days after operation, one died of tetanus. He had two large hydroceles and took off his bandage to scratch and got infected and died the day he should have gone home and his people started to carry him back to his town to kill a goat and have the witch Doctor make his medicine, but he died before they could get him in the canoe. The other two died of the operations, one never recovered after strangulated hernia (he was alcoholic and had a bad heart), and the other one died of streptococcic peritonitis five days P. O. she came in with large myoma, a bleeding infected uterus and was in a bad condition but I took the chance and test. But Dr., what I wonder is, why don't they all die?

Now I have them from 250 miles; had one came 650 miles, and tonight I have a sick Portugese in my house, 36 in my hospital, and all are doing well.

Now I am due to start home in one month and 15 days, but I will not be able for I am awaiting another doctor. If I leave, the station must close and I can't agree to that.

Doctor, for two years and 24 days I never saw but one American and his wife, and on July the 24th I took them to the steamer and now for two months I haven't seen any, but am alone in Jungle Town and have the entire station to care for. I supervise the church work, teach the lessons, keep books and care for station. Go to steamer (when they come, but for two months have had none and no mail), keep nine lazy negroes at work, buy food for me and the Mission and school. I teach a school of 57 besides my medical work, and of course, I am tired, for I have not had a rest since I came. Well, doctor, I am not complaining, and my message home is, "Yes, I'll keep the lamps all burning—Gleams I'll send across the wave, Tho' my heart may oft grow weary, God will help me to be brave, Tho' the stones may break around me, Tho' the dreadful breakers roar, When my Savior comes, He'll find me, Keeping lights along the shore.

God bless you and keep you till we meet."

Sincerely,

L. E. SMITH.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., February, 1920.

THE JOURNAL issued on the first of each month. Entered as second-class matter. January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription - - - - - - - $2.00 per year
Single Copies - - - - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—H. R. Johnson, Fairmont.

FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

SECOND VICE-PRESIDENT—W. E. Vest, Huntington.

THIRD VICE-PRESIDENT—Joseph L. Miller, Thomas.

SECRETARY—J. Howard Anderson, Marytown.

TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

THE NEXT MEETING

It is time to begin to arrange our plans for being in Parkersburg in May.

This is going to be upon us before we know it, and we must all determine to be there and to make it the most enthusiastic meeting the Association has ever held. Last year was certainly a banner one for us in every way. There is every reason why this year should be even better.

Things have gotten settled down and our men from the service are now back at home or in new locations. It should be that our attendance will be the largest we have ever had.

The request is made that all of the members who intend to prepare papers, will at once write to Dr. Anderson and tell him what their subjects will be, that he may begin to arrange his program tentatively.

One can hardly realize what a stupendous undertaking the secretary has in getting the scientific program in shape. I am sure that if the members only knew the great amount of time and thought Dr. Anderson has to give to this they would give him all the assistance

in their power. Letting him have your subjects will be of untold help to him.

Then do not forget this effort to have ONE THOUSAND MEMBERS by the first of May. To do this not only the officers of the County Societies but all of the members should get to work to secure all of the men in their territory who are eligible. Dr. Anderson has set the goal at one thousand but he would not complain I am sure if it was twelve or fifteen hundred.

Let us all work to get the membership and help about the program.

HEALTH INSURANCE AGAIN

So frequently this question has been mentioned that some hesitancy is felt in mentioning it again. Yet I do not feel that the rank and file of our profession are alive to the seriousness of this matter. We are so busy attending to the work in hand that we do not stop to realize what is developing in the way of legislation.

This question is a very urgent one and we are going to have to look ahead somewhat. It will confront us in West Virginia during the next session of the legislature in all probability. Fellow members, please begin, let me insist, to give this thought.

The following has bearing on the importance of our being awake to the trend of the times for legislation working hardships ruinous to our profession.

"The Working of Health Insurance in Germany.—Quite recently, the Kolnische Zeitung reminded its readers that every political party in Germany, including the most extreme Socialists, were united in praising the medical profession for its devotion, skill, and self-sacrifice during the war. But physicians cannot live merely by fine words, and the National Assembly, without protest from any of the political parties, has sanctioned alterations in the regulations for compulsory insurance that will ruin the profession. Before the war, the compulsory insurance scheme applied to the laboring classes and to those who earned incomes less than $625 per annum. Persons who could satisfy the authorities that their earned incomes did not exceed $1,000 per annum were also permitted to join the scheme if they so desired. The fees which physicians received on behalf of those insured persons worked out to not more than eight cents a visit, with the result that to make a living a physician had either to undertake more work than his own health or his medical conscience could justify, or to increase his income by private practice.

The Center brought up a proposal to raise the limit of compulsory insurance to incomes of $1,000 per annum, and of voluntary insurance to $1,500. The Socialists proposed that the compulsory limit should be 1,500 and that there should be no limit to voluntary insurance. The Socialist scheme was adopted, with the result, it is rumored, that some 21,100,000 persons who formerly were private patients will now be under the insurance scheme—and the medical profession will be ruined."—N. J. M. J.

The following, written by Mr. J. Ogden Armour, as an editorial for The Armour Magazine, came to my notice. It is something which appeals so for its wholesome commonsense that it seems too good not to pass it on.—Ed.

GROWING

Most people want to grow. They would like to advance in their work, earn more, have greater influence, do

bigger things. Yet, strange to say, the world is full of people who do not "grow up." They have lost the secret of their youthful days. They come to a halt in self-development, and folks say they are getting "old."

But a person is never old until he quits growing; and he need not quit growing until the end of his years. The most conspicuous fact about great men —men who do big things, and keep on doing them—is that they never cease growing. They are perpetually young.

They have the real thing, of which Ponce de Leon's "Fountain of Youth" was only an imitation.

If a man sets his heart upon growing, he has but three things to do:—

First, he must be a *Learner* all his life. I do not mean from books only. Almost any one can learn from books. Many have attained the knack of learning from things, by observation. Few have acquired all there is to the art of learning from other people.

Yet, almost every one you meet has something important to teach you, tell you, or show you, if you know how to ask intelligent questions, and if you are genuinely interested in learning. Some will give you information, some will teach you wisdom, some will show you the right manner of delivering a smile or handshake. The man who would grow must be a human interrogation point.

Then, he must be a *Thinker*—and must think hard. He may not be able to "add a cubit to his stature, by taking thought," but he can surely add to his personality, his influence, his power and success. Many people never put a load on their brains, and their brains, like an unattached locomotive, always run "light." Unless a man revolves in his mind what he learns and observes, he never gets any use from it. He must make deductions.

Finally he must be a *Doer*. Some people are long on thinking but short on doing. They are the dreamers. But Experience is, after all, the greatest of all teachers. When you have the courage to tackle the difficult thing which tests your utmost ability, then you are down to the business of growing in all its fine points.

The bumps you will get, the discouragements you will encounter, and even the mistakes you will make in being zealous in your doing, will be among the best parts of your education.

When I meet a man who shows me he has lost interest in his business, I feel sorry for him. I know that he has ceased to grow. For there is no better place to practice growing than in one's daily work. It is a field of unending possibilities for learning facts, meeting people, attaining new triumphs day after day that prove one's mettle and one's brains. Success and rewards always come to the person who continues to grow but the greatest reward consists in having found the secret that makes life continuously interesting.

Society Proceedings

The regular meeting of the Cabell County Medical Society was held on Thursday, January 8, 1920, at the Hotel Frederick, at 8:30 p. m., the president, Dr. C. M. Buckner, presiding.

The secretary presented this brief history of the Society since its foundation 29 years ago:

On January 8, 1891, just 29 years ago tonight the Cabell County Medical Society had its inception, at that time under the proposed name of the Hunt-

ington Medical Society. This meeting, for discussing organization, was held in the office of Dr. W. D. Row. The second meeting, on January 15, was held at the office of Drs. Buffington and Prichard, at which a constitution and by-laws were adopted, formulated by a committee consisting of Doctors Myers, Prichard and Hallaran. The order of business, as proposed by the same committee was also adopted, and it might be noted "without alteration or debate."

The constitution called for a President, First Vice and Second Vice President, a Secretary and a Treasurer. Dr. W. D. Row was elected President, Dr. J. D. Myers, First Vice President; Dr. McCoy, Second Vice President; Dr. C. R. Enslow, Secretary, and Dr. T. J. Prichard, Treasurer.

The subject chosen for discussion at the first regular meeting was "Bronchial Affections" to be opened by Drs. I. R. LeSage and T. J. Prichard. There were present at this first regular meeting, seven members, Drs. Row, McCoy, LeSage, Prichard, Hallanan, Davis, and Myers. Doctor Myers, Chairman of the Committee on Publication, reported that he could get 100 copies of the Constitution and By-Laws printed by "The Argus" for $5.00. The subject of "Bronchial Affections" was then opened by Doctor LeSage with a very interesting and exhaustive paper; being discussed by Drs. Prichard, Mayo, Row, McCoy and Myers. It is seen that six of the seven members present took part in the discussion, or 85.7 per cent, showing that there was considerable interest.

At the next meeting Dr. E. W. Cox presented a very peculiar and interesting case and asked for a diagnosis. Dr. Mayo reported a case of passage of gall stones and asked the treatment of same. After some discussion, phosphate of soda was recommended. The various forms of pneumonia and their treatment were discussed.

At the regular meeting on March 17, of the same year, it is noticed that Dr. Cox presented an Essay on "Gastric Dyspepsia," which was discussed at length; and "the conclusions therein generally agreed to by the Society." Dr. Enslow presented a paper on "Tuberculous Laryngitis."

The paper of greatest interest at the next meeting seems to have been one by Dr. Gardner, on "The Uric Acid Diathesis," as it was discussed by 100 per cent of the members present. It is observed that one of the members was notified to appear before the Society to show cause why he should not be suspended for non-payment of dues. The subject chosen by Dr. Myers on "Liver Indigestion" proved interesting as was shown by the large percentage of those discussing it.

On February 12, 1903, at a meeting held in Dr. LeSage's office the new State Charter was adopted, and the name changed to the "Cabell County Medical Society."

In 1904, 13 years after organization, the membership was 23. Today, after 29 years, our membership is 80, and is rapidly on the increase.

The applications of Drs. Mark Sutphin and E. N. Miller were voted upon for membership in the Society, and were unanimously elected.

The chair appointed on the Committee of Public Health and Legislation Drs. L. T. Vinson, I. C. Hicks and Jas. R. Bloss.

A sub committee on the arrangement of the year's program was also appointed, consisting of Drs. R. J. Wilkinson, E. D. Wells, and C. G. Willis.

There being no further business, the Society adjourned until the next regular meeting on January 22.

F. C. HODGES, *Secretary.*

December 19, 1919.

Editor West Virginia Medical Journal,
Huntington, West Virginia.

Dear Doctor:

The Fayette County Medical Society held its regular monthly meeting at the McKendree Hospital on December 9, 1919, at which time the following officers for the year of 1920 were elected:

Dr. W. E. Smith, President; Dr. L. R. Harless, First Vice President; Dr. W. E. Bruce, Second Vice President; Dr. H. L. Goodman, Secretary-Treasurer. Censors, Drs. E. E. Jones, H. C. Skaggs and C. W. Lemon.

Dr. Jones, of Mount Hope, read a paper on the question of increase in fees for Obstetrical cases, which was discussed by every member present, and it was the unanimous opinion of all members present that the fee for list work should be not less than $10.00 and all private cases the fee should be not less than $20.00, and it was agreed that these should be the minimum fees charged by the members of this society in the future, for this class of work.

H. L. GOODMAN, *Secretary.*

McKendree, W. Va.,
Jan. 13, 1920.

The Fayette County Medical Society met in the assembly room of the Dun Glen Hotel, Thurmond, W. Va., on the night of January 13, 1920, with the following members being present: Drs. Skaggs, Lemon, Bannister, Crews, Bruce, Poliakoff, Laird, Farren, Goodman, Hartley, Summers, Harless, W. E. Smith and G. A. Smith.

The meeting was called to order by the President, Dr. W. E. Smith, of Mendin, and the minutes of the last meeting were read by the Secretary, and there being no objections they were approved.

Dr. C. A. Farren, of Beury, W. Va., read a very interesting paper on the Symptoms and Treatment of Urethritis, which was discussed by Drs. Poliakoff, Laird, Smith and Skaggs.

Dr. Laird, Surgeon in Chief of the Kanawha Valley Hospital of Montgomery, read a paper on the Principles of Thyroid Surgery, which was discussed by Drs. Summers, Poliakoff, Goodman and Smith.

The application of Dr. Brugh was presented by Dr. Skaggs, and on the motion of Dr. Bruce, seconded by Dr. Summers, the by-laws were suspended and Dr. Brugh was elected a member of the society.

The application of Dr. Garevy, of Kilsythe, was presented by Dr. Poliakoff, and on the motion of Dr. G. A. Smith, seconded by Dr. Lemon, the by-laws were suspended and Dr. Garvey was elected a member.

Dr. Harless reported a very interesting case of Encephalitis Lethargatha, which was freely discussed.

There being no further business, the meeting adjourned to meet at Thurmond, the next regular meeting.

W. E. SMITH, *President.*
H. L. GOODMAN, *Secy.-Treas.*

The Mercer County Medical Society met in Bluefield, November 21, 1919, in the Chamber of Commerce, at 8 p. m., President McGuire presiding. The Minutes of the last meeting were read and adopted.

Under clinical cases, Dr. H. G. Steele reported one or two cases of infection, in which he was getting very gratifying

results with Sherman's bacterin. Under papers, Dr. H. G. Steele read a very valuable paper, topic, "To Hell With Sanitation Anyway," which was enjoyed by all present and freely discussed. The paper showed that Doctor Steele had given this a great deal of thought in preparing same. On a motion of Dr. St. Clair and seconded by Dr. Bird, the president appointed the following committee: Dr. H. G. Steele, Chairman; Dr. J. E. Martin and Dr. B. W. Bird to negotiate with the county court and various city councils of Mercer County the importance of having a full-time health officer and to remind them of the law in this state where they had the power to lay a levy to maintain the same.

It was decided that a resolution passed some time ago requiring specialists to remove their sign as specialists to be cancelled and that it be optional with the specialist himself as to his displaying same.

It was moved and seconded that the pre-war arrangement relative to luncheon be disposed of and return to our former arrangement where the society paid one-half and the local physicians the other.

There being no further business, the society adjourned to meet in Princeton, December 18, 1919, at 8:30 p. m.

E. H. THOMPSON, *Secretary.*

The Mercer Medical Society met at the regular session on December 21st, at Princeton, W. Va., with President McGuire in the chair. The minutes of last meeting were read and adopted and a report of clinical cases was called for, in which Dr. Steele reported some very interesting cases, which were freely discussed by most of the members present. Also Dr. Todd and Dr. Wallingford reported very interesting cases. The paper to be read and demonstrated by Dr. W. C. Slusher on "Scenes of the War," was postponed for the January meeting, to be held in Bluefield on January 22, at the Chamber of Commerce.

Dr. Thompson made a report that the McDowell County Society expected to decide to affiliate with the Mercer Society which was received in an enthusiastic manner by the society and it was moved and seconded that the secretary of the Mercer Society be instructed to write to the secretary of the McDowell Society and also the Tazewell County Society that we wish them to meet with us at our January meeting to discuss our plans.

The president appointed the following auditing committee to audit the secretary and treasurer's books for the past year: Dr. T. E. Vass, Dr. G. T. Thornhill and Dr. S. J. Kell.

There being no further business, a motion was made to adjourn, after which we retired to the Virginian Hotel and enjoyed a splendid banquet which had been prepared by the physicians of Princeton.

E. H. THOMPSON, *Secretary.*

Jan. 6, 1919.

Editor West Virginia Medical Journal:

There never has been any direct report from Monongalia County Medical Society for years appearing in our Journal.

We generally keep too close within ourselves to think of what might be interesting to others. At times our members have been torn by discussions, jealousies and misunderstandings. After all, most troubles in life come from not understanding the other fellow. Most of us have come to see the good in the other fellow and appreciate his good

qualities and overlook his short comings.

The great war has done some of us good. We have broadened our views of life, and have learned to throw our little spites to the winds, and meet our fellow practitioners in a spirit of professional manhood, and our Society bids fair to become more useful and powerful for good.

At the December election we unanimously elected a man to the presidency who has been for weeks in the front line trenches in France, and who had been wounded with machine gun bullet, shrapnel shell, and rupture of the internal ear by the concussion of high explosive shells. This is Dr. H. C. Powell. He is the only one of our ten men in the service that became injured at the battle front in France. Another of our best men, Dr. B. B. Cox, lost his life from an assassin's bullet while in hospital service near the front. The balance of our medical men returned well, and are now taking a most active interest in all professional work and public affairs generally.

The year 1919 was a prosperous year for our medical society. We hope 1920 will be better.

You may hear from us further.

C. H. MAXWELL, *Secretary.*

State News

COL. CLYDE S. FORD

The State of West Virginia is justly proud of the army record of Colonel Clyde S. Ford, of the Medical Corps.

Col. Ford is a member of the W. Va. State Medical Association and formerly a visitant to the Ohio Valley General Hospital.

His record in the Philippines and in the Spanish-American War is well known to the readers of our Journal. During the second Balkan War he was assigned to the Embassy at Constantinople and his distinguished service while there in suppressing the Cholera, establishing nursing stations and reorganizing the Red Cross, was recognized by the rulers of five countries by conferring upon him the highest decorations that could be received by a foreign army officer.

Colonel Ford served all through the recent world's great war and was awarded by Commander in Chief, Gen. John J. Pershing, citation for exceptionally meritous and conspicuous service at Base Hospital Section Number Five in France with the A. E. F.

Col. Ford has recently been in Palestine, Armenia, with Constantinople as his headquarters as a member of the "American Committee of Relief in the Near East."

Many of Col. Ford's writings and reports have been published by the government.

The Journal and the men in medicine in our Commonwealth wish our distinguished colleague in peace and war God's speed and abundance of health and a safe journey home.—F. L. H.

Dr. D. P. Crockett, who has been practicing his profession at Hardy, Ky., has located at Big Creek, W. Va.

Married in Huntington, December 20, Miss Reba Samms and Dr. James W. Skaggs, Dr. Skaggs is located at the University of Maryland and College of Physicians and Surgeons at Baltimore. He is a brother of Dr. C. S. Skaggs, of White Sulphur Springs.

Dr. W. E. Vest of Huntington, was elected a Fellow of the American Col-

lege of Physicians at a recent meeting of the Membership Council held in the city of New York.

Dr. F. F. Wright, formerly located at Piedmont, has moved to Burlington.

The Clinical Conference of the Hospital Staff of the Ohio Valley General Hospital was held in the Nurses' Lecture Hall Tuesday evening, January 13th, at 8 o'clock.

Programme

1. Our Shortcomings and their Remedy; Dr. Wilkins.
2. Caesarian Section, Case Reports; Dr. Fulton.
3. Thrombo Angeitis Obliterans (Buerger); Dr. Schwinn.
4. Exhibition of Pathological Material; Dr. Mabel Clovis.
5. Post-operative Parotitis; Dr. Drinkard.
6. Pernicious Anaemia, Diagnosis, Exhibition of Cases; Dr. Caldwell.

These monthly conferences, attended by the nurses of the training school, visiting staff and the interns, have been very helpful and full of interest to those attending.

Dr. K. H. Trippet has returned from foreign service and resumed the practice of medicine and surgery at Grafton, W. Va. He is associated with his brother, Dr. L. H. Trippet, Jr.

Dr. George MacQueen, of Charleston, attended the Jackson Day Banquet held in Washington in January.

Dr. A. L. Amick, of Charleston, has been spending a few weeks in Baltimore doing post-graduate work.

Dr. G. H. Barksdale has returned to Charleston from army service and has resumed practice.

Dr. H. L. Robertson, who was connected with the Canadian army during the war, has returned to Charleston and has reopened his offices.

Dr. Christian R. Holmes, Cincinnati, Ohio, died in New York, January 9th. Dr. Holmes served as Major at Camp Sherman during the war, and this service was of such stress as to be said to be indirectly responsible for his death. He was Dean of the College of Medicine of the University of Cincinnati.

Dr. C. V. Gautier, former Huntington resident but now of Lakeland, Fla., has been commissioned a major in the reserve corps, according to word received by Huntington friends. Dr. Gautier was commissioned first lieutenant in the medical corps in 1917. He was promoted to captain in February, 1918, after serving in France 19 months with the Eighth Eero squadron as surgeon. He returned to the United States in May, 1919, and was stationed at Charleston, S. C., until discharged August 18, 1919.

Dr. W. Byrd Hunter, formerly of Boston, has decided to make Huntington his home. He has arrived here and will immediately take up his practice. He is a specialist on children's diseases.

Dr. Hunter spent four years in Alaska in the service of the United States government.

Dr. C. C. Hogg, of Huntington, left January 15th, for Lake Highlands and other Florida points, where he will spend

several weeks. He will probably go to Cuba before his return to the United States.

Dr. I. C. Hicks and family, of Huntington, have gone to Palm Beach.

Miss Anna M. Trimble, of Huntington, has been made superintendent of nurses at the Chesapeake and Ohio Hospital, Huntington. Miss Trimble succeeds Miss Nelle A. Leonard, who resigned to take a position in another city.

Dr. William J. Mayo, Rochester, Minn., left for Argentina and other South American countries to promote an international organization for the advancement of surgery. Dr. Franklin Martin, secretary of the American College of Surgeons, will accompany him.

More than two hundred physicians in the Bronx, New York City, have organized a labor union, which is intended to take in eventually the entire city and to affiliate with the American Federation of Labor. The aims of the new union include bringing about union conditions for physicians in the employ of insurance companies and in hospitals and to fix union rates for physicians generally.

IF ANY ONE HAS

Killed a pig
Shot his wife
Got married
Borrowed a stamp
Made a speech
Joined the army
Robbed a bank
Bought a Ford
Sold a dog
Lost his wallet
Gone fishing
Broke his neck
Committed suicide
Shot a cat
Bought a house
Been away
Come back home
Moved his office
Got rich
Taken a vacation
Been in a fight
Got licked
Has no oil stock
It's news.

SEND IT TO
THE EDITOR.

—Wisconsin Medical Journal.

MEDICINE

CORPUS LUTEUM EXTRACTS IN THE VOMITING OF PREGNANCY

J. K. Quigley (*American Journal of Obstetrics*, August, 1919) gives histories of several cases in which this treatment was applied. The total number of patients treated by him was seventeen; twelve were permanently benefited by the treatment, and four others were benefited but relapsed, not enough of the drug having been given. In one case, of the pernicious type, there was complete failure. The corpus luteum extract was often injected intramuscularly, e. g., in the deltoid muscle, in doses of one mil, repeated every four days, daily, or even oftener. In some cases five grains of extract were given by mouth three times a day. The average number of injections given was seven. In the four relapsing cases only three to five doses had been given. Had these patients been given more of the drug at the onset as a routine, permanent benefit would probably have resulted. The

one mil ampoules of extract employed in administering the intramuscular injections each contained 0.2 gram of desiccated corpus luteum substance.

PREPARATION AND PROPERTIES OF ANTIPNEUMOCOCCIC SERUMS

C. Truche (*Bulletin de l'Academe de medecine,* June 17, 1919), in preparing these serums, cultivates highly virulent pneumococci on his special T and MM media. After incubation for fifteen to eighteen hours, the sediments obtained by centrifugation are treated with a mixture in equal parts of alcohol and either, then dried in sulphuric vacuum. Finally, the product is ground and kept in sterile flasks. In immunizing a horse, known amounts of the alcohol-ether germs are injected intravenously on ten successive days. The horse is bled eleven days after the last injection, fifteen days later, ascending doses of germs are injected on four successive days, rest for eleven days allowed, the animal then bled again, and so on. Death of the animal from hypersensitiveness to injections is always obviated by diluting the germs in a large amount of tepid saline solution. Mice are used in titrating the serums. Four different serums, representing four types of pneumococci, are prepared. Three of these correspond to the first three American types. The fourth, likewise an active germ, is different from the American Type IV, and is a special strain isolated by Borrel and Kerandel from colored troops. The serums are primarily specific as regards prophylaxis, but when highly active are also polyvalent. The-cise bacteriological diagnosis is clinically necessary before serum is used. In lung infection, the affected area is punctured with a fine needle and a few drops of fluid obtained by suction with a syringe, to be grown on agar. In established pneumonia, eighty to 100 mils are injected subcutaneously on the first day, and twenty to forty mils on succeeding days.

The intramuscular route, is to be preferred, and requires only thirty to forty mils on the first day and twenty mils thereafter. The procedure of choice, however, is intravenous injection. To obviate reactions in patients who have already had therapeutic serums, the twenty mils for intravenous use—hitherto sufficient—are diluted with 180 mils of normal saline solution at body temperature. The first twenty mils of the dilution are given very slowly, the remainder more rapidly. The pulse rate is carefully watched during the treatment. If the pulse rate falls before or along with the drop in temperature, the prognosis is favorable; if not, the injection must be repeated. If the pulse remains high, the treatment has probably been started too late. In pneumococcic pleurisy, sixty mils of serum should be introduced after evacuation of the effusion and on subsequent days, twenty mils. In meningitis, forty mils are injected intraspinally after puncture and twenty mils intravenously, to be repeated for at least four successive days. In endocarditis, twenty mils are injected intravenously and repeated. In pneumonia, defervescence occurs in one or two days and the pulse drops to an average of eighty. In pleurisy, the serum seems a good adjunct to surgical treatment. As for the efficiency of the serum in pneumonia, the author is in possession of much evidence showing that the mortality in grave forms is greatly lowered.—N. Y. Med. Jour., Sept. 13, 1919.

Surgery

TREATMENT OF BUBOES BY FONTAN'S METHOD

Dubreuith and Mallein offer (*Med. Press*) the results of their experience in the treatment of chancroidal buboes with the Fontan method.

Modus Operandi: When the bubo presents unquestionable fluctuation, puncture with the point of a scalpel, taking care to make a very small opening, expressing as much of the pus as possible. Thereupon inject iodoform vaseline to take its place. The only special feature of the writer's technique is that the iodoform vaseline is injected cold, and with that object in view they fill the syringe hot, allowing it to cool before making the injection, plunging it if necessary, into cold water.

The glass syringe made use of for urethral injections answers the purpose very well. The reason for this little modification is simple enough, viz.: in order that the vaseline shall not tend to come out again. In the original procedure this tendency to escape of the vaseline is combatted by cold water compresses, but the authors found it much simpler to cool the vaseline beforehand. When there are a number of cases to be treated it is convenient to have several syringes filled with iodoform vaseline ready for use.

The skin over the bubo is shaved and rendered aseptic, a small incision with a scalpel, complete evacuation of the pus, followed by the injection of ten per cent or even fifteen per cent iodoform in vaseline. Cotton wool steeped in collodion is placed over the orifice and maintained in position with a spica bandage.

Forty-eight hours later the dressing is taken off, the cavity is emptied of vaseline, and a fresh collodion and cotton wool dressing is applied.

Although they mention forty-eight hours as a suitable period before removing the vaseline there is no objection to leaving it longer, provided there be no signs of local inflammation and pain. The vaseline that comes out is often void of color, as if the iodoform had undergone absorption.

As a general rule, after the evacuation of the vaseline the treatment is finished and a complete cure obtained. The patient can usually be discharged from hospital in from four to six days after admission, and when he is detained longer than this the cause is not the bubo, but the originating soft chancre, the cure of which is more protracted.

INJECTING TETANUS ANTITOXIN BEFORE SECONDARY OPERATION

A. Broca (*Presse medicale,* May 15, 1919), reporting the decision of a committee appointed to study this question states that undoubted cases have occurred demonstrating that the tetanus bacillus may remain dormant for a long period at the site of a former wound, and then be set free and brought into activity again by an additional surgical operation. Pre-operative reinjection of antitetanic serum is thus opportune, to obviate the danger of tetanus. It is not, however, an absolutely necessary measure. Surgeons have performed thousands of secondary operations without it and without any instance of tetanus. Re-enjection of serum entails, moreover, some risk of an anaphylactic reaction.—*New York Med. Jour.,* 9-13-19.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 9 HUNTINGTON, W. VA., MARCH, 1920 Subscription $2.00 per Year
Single Copies 20 Cents

ORATION IN SURGERY

Read before West Virginia Medical Association, May, 1919.

By O. F. Covert, M. D.
Moundsville, W. Va.

SURGERY OF THE CHEST

The period from June 28, 1914 to Nov. 11, 1918 marked the greatest upheaval the world has ever known. Everything that touches human experience, that goes to make up the social fabrichas been touched by the change, and change greater than was even dreamed of before. Changes political, governmental, religious, social, economic, and in the realms of science.

Put in a sentence, are apt to say the cause of the upheaval was the German Kaiser's lust for world power and that it was initiated by the murder of Archduke Ferdinand of Austria at Sarajevo, June 28, 1914. True no doubt, but probably not all the truth. There were other and deeper causes, and the world was ripe for the upheaval. For while the war has ended, German autocracy and militarism has bee n destroyed, the peace treaty will soon be signed, yet there is no peace. Men are still at each others throats, national and ethnic lines are still strongly drawn, both antagonistic to international peace. The ideal democracy that was to have settled down upon us at the close of the war has not yet settled, and the world is still struggling to adjust itself somewhere between the extremes of autocracy on the one side and Bolshevism on the other.

Whether the affairs of mankind are controlled by God who knows the end from the begining, or whether they proceed along natural evolutionary channels, I know not, but something impeded smooth progress. The world body politic was disordered, diseased. We had too much selfishness, too much demagogism, too much idealism, too much something, depending on who is giving the reason for the upheaval, but the malady could not be cured by the ordinary means, by promises, by theories, by platitudes, by sophistry, by idealism and so the cataclysm came, and as we sometimes think that nature cures by a profligate waste, so this world malady

is being cured by a profligate waste of life and treasure. But in the process much that is false, useless, and idealistic will be cast aside, we shall live realities and life and all that pertains to it will be saner and more efficient than ever before. Science along with other things has been touched and changed and in some instances revolutionized by the upheaval. Mechanical engineering, electrical engineering, and particularly the chemical industries have made great change and progress.

Nor has medicine been passed by. Medicine of course is more exact than political, economic or social questions, but it is not a fixed or finished science. There will always be old ideas to discard, and new ideas to embrace, new theories to examine, new facts to incorporate in our knowledge, new and greater efficiency always ahead. Not many if any, entirely new principles have been enunciated or new discoveries made in the past four and one half years, but we have gathered together a mass of data, and have had a wealth of experience from which to draw accurate conclusions. The exigencies of the times have compelled us to cast aside theories, useless, outgrown, and unproven procedures, and out of it has developed the practical, the positive, and the proven.

In the beginning, the draft gave us much useful information. We found an astonishing amount of illiteracy among our young men, we found an astonishing number of men who made a very poor showing in the psychologic tests, we found a very large number of men whose general physical condition was below normal. As the men came into camp very many of them had active venereal disease, and we found many lesions that could be corrected by surgery, phimosis, inguinal lymphadenitis, hemorrhoids, hernia, and diseased tonsils. All this has given us much data for thought, talk, propaganda, and legislation.

But from the battle fields of France and Belgium has come the unparalleled amount of acute traumatic surgery, the handling of which has developed principles and taught lessons, upon which will be founded the surgery of the future.

Some of the literature has already appeared, more will follow, and also no doubt the experiences of the other side, the work of the German surgeons. Every branch of surgery has gained in experience, surgery of the head is on a new basis, plastic surgery has made great progress, the treatment of fractures has been simplified and made more efficient, roentgenology has developed as never before, and the treatment of sepsis, the great bugbear of surgery has almost been standarized.

It would require a separate thesis to note the developments in any branch of surgery, so I have elected to take up the surgery of the chest particularly that of the heart and lungs, some what in detail.

There was very little surgery of the heart prior to 1915. The almost universal treatment of wounds of the heart was by the expectant method. True the pericardial sac had been drained both by aspiration and by incision, methods of exposing the pericardium had been developed, but not much surgery of the heart itself had been done. In the past three years a number of foreign bodies have been removed from the heart, both from the muscle and from the cavities, and from the vena cava.

A gunshot wound of the heart is almost always complicated by a gunshot wound of the lungs, but not always, so

frequently the wounds of both heart and lungs must be cared for at the same time.

The diagnosis of heart injuries from clinical signs and symptoms is quite uncertain. A penetrating wound of the thorax is very likely to produce a wound of the lung with its characteristic signs, hemo and pneumo-thorax. If the location is such that it is likely to produce a wound of the heart, and if there is great irritability and pain in the region of the heart, a suspicion of heart injury is justified, but the main dependence must be put in radioscopy. If it shows immobility of the heart shadow, it indicates heart injury with certainty.

It will show a hemopericardium and this in conjunction with the clinical signs will suggest the location and nature of the injury. A non-perforating wound of the left ventricle gives a hemopericardium under very strong tension, with signs of angina; a perforating wound of the left auricle gives a hemopericardium with slight tension, and causes cyanosis; a perforating wound of the right ventricle causes hemopericardium with medium tension and signs of severe hemorrhage; an injury of the apex gives only slight hemopericardium. When radioscopy does not show a hemopericardium, the cardiac wound is not dangerous, and operation is not urgent.

Foreign bodies may be parietal or cavitary. Cavitary bodies usually demand removal, while parietal do not.

Delorme gives the following indications: When there is persistent pain and violent palpitation on the least exertion, operation is clearly indicated whether the projectile is parietal or cavitary. If the projectile is regular it may be left, whereever situated, but if irregular or jagged, intervention is called for.

There are various methods of approach but a tolerably simple and satisfactory method is the one in which incision is made between the fifth and sixth ribs, the internal mammary artery ligated, and the ribs spread by retractors. More room can be obtained by cutting at the sternal end the cartilages of the fifth, fourth, and third ribs. Still more room can be obtained by partial resection of the sternum. The mortality in these cases is not excessively high. Thirteen cases operated on in France gave three deaths.

But the larger part of the surgery of the chest is comprised under the surgery of the lungs. This can first be divided into two great classes, (1) acute traumatic surgery, (2) surgery of the pyogenic infections of the lungs and pleura, non-traumatic.

The acute traumatic cases can again be divided into three classes (1) those cases on which immediate or very early operation is imperative, (2) those cases in which the time of operation is somewhat a matter of choice, (3) those cases in which a later infection makes operation necessary.

One of the lessons of the war is that surgery of the lung is not essentially different from surgery of any other part of the body. The thoracic contents can be treated much as the abdominal contents. In the past it was feared to open the thorax because of collapse of the lung and various cabinets were designed for thoracic surgery, but these were found unnecessary, and the thorax can be opened and contents handled as safely as the abdomen can be opened and its contents handled.

My consideration of acute traumatic surgery of the lungs will be a consideration of the wounds and their treatment in the late great war. The incidence of chest wounds is quite high.

At the beginning most chest wounds were treated expectantly with a resultant high mortality of 25% to 40%, but experience soon showed that while many wounds were best treated expectantly, there were many in whom the mortality could be reduced by early and active surgical interference.

There were three types of missile producing three general types of wounds. (1) the small steel jacketed bullet, that usually passed entirely through the body, and rarely carried in any foreign material, (2) the shrapnel bullet larger and moving more slowly, making a larger wound of entrance and exit if it passed through, which was frequently retained within the thorax and frequently carried in some foreign material, (3) shell fragments which produce large ragged wounds, and almost always carry in some foreign material.

As complications of any of these we may have fracture of the ribs, sternum, scapula, spine and fragments of bone may be carried inside.

The three most constant signs of gunshot wounds of the chest are hemoptysis, hemothorax and pneumothorax. Hemoptysis and pneumonthorax are present in the majority of the cases, and hemothorax in some degree in all. Hemothorax may originate from the wound of the parietes, or from the wound of the lung. The pneumothorax may come either from the outside or from the lung.

As a rule through and through wounds of the chest made by steel jacketed bullets do not demand operation, at least not immediately. The exception to this are the cases showing serious internal or external hemorrhage. These cases should have immediate thoracotomy, and suture of the bleeding vessel if in the parietes, or ligature, or suture of the wound in the lung, as conditions may indicate. Patients not operated on should be put to bed, and given morphine to quiet nervousness and relieve pain.

Some degree of hemothorax is present in all these cases and pneumothorax in the majority of them. The presence of pneumothorax can be disregarded and a moderate amount of hemothorax will take care of itself by absorption.

If the hemothorax is large, thirty ounces or more, a portion, one third or one half should be aspirated, and the aspiration be repeated if necessary. If the hemothorax becomes infected as occurs in a tolerably large percentage of cases the chest must be opened and drained. The indications and technic will be given later.

Some surgeons, particularly the Italians, advocate complete aspiration of all hemothorax cases and the production of an artificial pneumothorax, carrying out the procedure even in the cases operated later for infection and removal of foreign bodies. The claims made are that the pneumothorax by causing collapse of the lung will prevent further bleeding, that a pneumothorax is more likely to remain sterile than a hemothorax, and that the final results are better, by preventing adhesions and as the pneumothorax absorbs it will allow normal expansion of the lung.

Experiences has shown that there are other cases than the hemorrhage cases that do better if subjected to early operation, and by early operation we mean that it should be done within eighteen hours after injury. These are (1) ragged wounds of the soft parts, (2) compound fracture of the ribs, (3) large pneumothorax, single or double, with suction of air into the pleural cavity, (4) those having a large foreign body in an accessible portion of the lung.

If there is no wound of exit, every-

case should have a radioscopic examination made to locate the foreign body.

In these emergency cases, the amount of operatitve work to be done depends on conditions present. All open ragged wounds should be excised and completely closed. The procedure is identical with the procedure in lacerated wounds in any other part of the body, all contused, lacerated, infected tissue is to be excised, and the wound closed in bayers, pleura to pleura, muscle to muscle, and skin to skin. If the pleura is too much destroyed to allow of accurate coaptation, muscle flaps are to be used. If there is compound fracture of the ribs, if it is deemed necessary to cleanse the pleural cavity, if it is necessary to stop hemorrhage of the lung, or if it is decided to attempt the removal of a foreign body at this time, then a thoracotomy becomes necessary. This may be done by enlarging the original wound, or it may be closed as above indicated and the opening made at a different location. If it is done for the removal of a foreign body, its location as determined by the X-ray will determine the location of the opening. If it is in the hilum, the opening may be made anteriorly or posteriorly, and the removal is best made with the aid of the fluoroscopic screen. But if the pleural cavity is to be cleansed, or an examination is to be made of the entire lung, then the operation of choice is resection of the fourth rib anteriorly from the sternum to the anterior or mid-axillary line. By using retractors good approach is obtained, the entire pleural cavity can be examined, any blood clots or foreign material can be wiped out; the entire lung can be delivered to the outside a lobe at a time by grasping with blunt forceps and drawing it through the opening. Here it can be carefully examined, foreign bodies located by the sense of touch and removed, either through the original or a new opening, bleeding points ligated.

Wounds of the lung should be treated in the same way that external wounds are treated, by excision of all contused and lacerated tissue, and the resulting wound sutured. The cavity is then sometimes irrigated with various solutions, either, normal salt, Dakin's, etc, and then it is closed tight, and as noted above some surgeons produce an artificial pneumothorax.

A certain number of these cases become infected later, pus forms in the pleural cavity, and they have to be reoperated later. With these for purposes of classification we group those cases treated expectantly, which later developed sepsis. These cases present the ordinary signs of an infection, pain, chills, sweating, and temperature.

The treatment is obvious, the chest must be opened and drained. This is best done by a rib resection, and usually it is desirable that the opening be sufficiently large to admit the hand in order to search for foreign material, as bits of clothing splinters of bone or the missile. All infected blood clots and foreign material should be removed, the cavity wiped clean and two drainage tubes introduced. The after treatment depends on the progress of the case. The cavity may or may not be irrigated on the views of the attending surgeon. Here, as in many other cases, if the operation is properly done, and all infected material removed, too much meddlesome after treatment is detrimental rather than beneficial.

We still have another class of cases demanding operation after injury, but neither emergency or infected cases at the time of operation, but those cases in which the time of operation is a matter of choice. These are the cases which were treated expectantly at the time of

injury, and either have failed to heal completely, and are left with a sinus, or having healed are left with some disabling sequellae; dyspnea on exertion, constant or frequent pain in the chest, or spitting of blood or pus.

The sinus cases are due to different causes, osteomyelitis of the ribs, a retained foreign body either in the parietes or the lung or a cavity or tract that has not completely collapsed.

The treatment depends on the cause. Dead bone should be removed, retained foreign bodies should be removed. Sinuses without a demonstrable cause can sometimes be cured by the injection of Beck's paste

The cases that have healed are left with the disabling symptoms mentioned above, are due either to a retained foreign body, or to a collapsed adherent lung, the result of a pleural infection.

The decision to operate or not to operate, require careful consideration and good judgement.

The tendency now is to operate much oftener than at the beginning of the war. If radioscopy locates a foreign body in the lung, the technic may be that heretofore mentioned, the resection of the fourth rib anteriorly, or the resection may be made in the location that will give the most direct approach to the foreign body. If the foreign body is deeply situated, it is advantageous to operate with the aid of the fluoroscopic screen. If the disability is due to a collapsed and adherent lung, much can be accomplished by opening the chest, relieving the adhesions, and subjecting the lung to decortication.

We have yet to consider the division of chest surgery due to pyogenic infection of the lungs or pleura, non-traumatic, the empyemas, of which there were so many in the camps of this country last fall, following the epidemic of influenza, as well as during the preceding winter and spring.

Opportunities for studying the etiology, pathology, and different lines of treatment were great, but even among the men directly associated with the disease, there is not entire unanimity of opinion, particularly as regards treatment.. The etiology is pretty well determined, the streptococcus, hemolytic, and non-hemolytic, and the pneumococcus being found in practically all the cases, occasionally the staphylococcus. The ratio of the streptococcus and pneumococcus varied somewhat in the different camps, Camp Custer for instance reporting seventy-eight cases due to the pneumococcus, and one hundred and forty-two cases due to the streptococcus. At Camp Sherman they were about evenly divided. The general opinion I think is that the hemolytic streptococcus was the organism of the greatest virulence, but that is not borne out at all the camps.

The large number of autopsies performed gave valuable information. At Camp Sherman they showed that every case of pneumonia was of the bronchopneumonic type, that the empyemas instead of showing a single large pus cavity, frequently showed several encapsulated pus cavities some of them some distance from the surface, and inaccessible by the ordinary operative procedures. These were responsible for the continuance of the severe symptoms after operation and ultimately death.

Nearly all the cases had a stormy and prolonged convalescence, temperature and pain recurring several times between the times of operation and the time of discharge. In my experience this was due to one of three causes,(1) lack of proper drainage, (2) too early closure of the incision, (3) the development of small

areas of consolidation in the lung. This was a new experience to me, and it was astonishing how quickly they would appear, and just as astonishing how quickly they would disappear. The diagnosis is made by physical signs, puncture and aspiration and radioscopy, the most valuable information being obtained by vertical flouroscopy. The treatment has not become standardized. If one will read the literature, he will find treatment varying from repeated simple aspiration of the pus cavity to large rib resection, sufficient to introduce the entire hand. Between these two extremes he will find advocated, repeated aspirations, with the injection of formalin and glycerin, introduction of a small tube through a stab wound, or through a large trocar, and repeated irrigation with Dakin's solution, thoracotomy with drainage, costatectomy with drainage, in some cases simple open drainage being used, in some instances an attempt is made to seal the wound around the tube, the pus is conducted into a container, with the production of negative pressure. Some surgeons advocate no irrigation, while others advocate irrigation with various sorts of solutions, particularly Dakin's. I shall not discuss all the various plans of treatment, but shall give briefly our experiences at Camp Sherman and the lessons learned there.

In the winter and Spring of 1918 fifty-three cases of empyema developed. On account of a little lack of harmony between the surgical and medical sides, the cases were not delivered to the surgical side early, but were treated on the medical side by repeated aspirations.

When they were turned over to the surgical side they were under the general supervision of Major Sherrill who had just returned from the Rockefeller Institute where he had taken an intensive course in the treatment of infected wounds. Forty-nine cases were treated by thoracotomy and drainage, four by costatectomy and drainage. All were faithfully treated with Dakin's solution for some time. When operations were first begun the mortality ran as high as 80%. When I entered Camp Sherman, June 12, 1918 I was assigned for a short time to the empyema ward. There were then about twenty of the cases still under treatment. At that time they were all being treated by the injection of formalin and glycerin solution. Capt. Windmueller, who was then in charge of the ward, told me that the improvement was very marked when the formalin solution was substituted for the Dakin's, and that never again would he use Dakin's solution in the chest cavity. The final results were; recovered without secondary operation, 19, recovered after extensive secondary operation, 7, still in hospital May 1, but will recover, 2, deaths 25 almost 50% mortality.

The first case of influenza appeared in Camp Sherman Sept. 22, 1918. The final count was 7618 cases of influenza, 2001 cases of pneumonia, 71 cases empyema, and a few more than 1100 deaths. The empyema cases began to appear the latter part of October. I was in charge of septic surgery at the time and my ward got the over flow from the regular empyema ward . The first four operated cases came to me Nov. 1st, and when I left Dec. 23rd I had twenty-one cases that had been under my care from four to seven weeks.

As soon as the aspirating syringe showed pus surgical consultation was asked for. We learned that while a case could be held too long before operation, it could also be operated too soon; that it was not wise to operate while the pneumonic process was still active; that it was best

to wait till the contents were decidedly purulent, therefore, the cases were aspirated until the proper time for operation had arrived. As before stated seventy-one cases of empyema developed and were operated on. Three were treated by the closed method. The cavity was drained by use of trocar and rubber tube inserted and kept closed. The cavity was washed out every two hours with Dakin's solution, for several days, and later solution of formalin and glycerin injected twice a day. Wounds closed in a month and cases were apparently cured. After one month longer, fluroscope disclosed fluid in pleura, and aspiration revealed sterile pus. Rib resection evacuated large amount of pus and lymph. The lungs were bound down by firm layers of organized lymph-cavities very large. A month ago they were all draining very profusely. The remaining sixty-eight cases were operated by resection of the sixth or seventh rib anteriorly. This was found to be poor practice. The first four cases coming under my care were operated this way. All of them had to be reoperated later by resection of the eighth or ninth rib posteriorly, and this was the procedure in the later cases.

The after treatment was not uniform. In the ward devoted exclusively to empyema the formalin solution was used for a time following operation, but this was discontinued. For a while also, a 25% solution of Glucose was injected into the cavities, and in the desperate cases used intravenously, but I think the general opinion was, it was of no appreciable benefit.

My own cases were treated rather simply. For the first two weeks nothing was done except the change of dressing, unless rise of temperature made one suspect imperfect drainage, or there was an unusual odor. In either case the cavity was irrigated with normal salt solution. After two weeks if there was only slight discharge, the formalin solution was used.

There were no deaths in my ward. Cases failing to heal were operated by resection of two or three ribs and breaking up of adhesions. Final results:

Total operations 71.

Recovered and discharged with full lung expansion, 39.

Reported for lung moblization,10.

All of these cases had chemical antiseptic injected into cavity at some time but none with Dakin's. Cases reoperated after closed treatment and still in hospital, 3.

Very ill, tubercular, 1.

Deaths, 15.

A little more than 20% mortality, better than the proceeding series, but admitted without discussion to still be too high.

SOME PRACTICAL APPLICATIONS OF THE CYSTOSCOPE.

Read before West Virginia Medical Association in Clarksburg, May, 1919.

By

LIEUTENANT COMMANDER H. A. GILTNER,
Medical Corps, U. S. Navy
Reserve Force.
Parkersburg, West Va.

Perhaps few modern diagnostic instruments are of greater value than the cystoscope, which with its recent refinements and accessories,is an absolute necessity for the precise diagnosis of diseased conditions of the bladder, ureters and kidneys and is indispensable in the correct treatment of many of these conditions.

While it is true, that on account of the

skill and experience necessary in the operation of the cystoscope, it is not practicable for every physician to use it for himself, yet its use in diagnosis is obtainable through men trained in its use in the same manner as the services of a trained laboratory man.

To the urologist, the cystoscope is indispensable but as a means of diagnosis it is equally valuable to the internist and the surgeon and it is to these rather than the specialist that this brief paper is directed.

No attempt will be made to give a technical exposition of the use of the systoscope and its accessories, but merely to mention briefly a few of the many pathological conditions in which its use is indicated in order to show its great value and that the physician who does not or can not avail himself of its use especially in difficult cases, is not giving either the patient or himself full justice.

No visionary impossibilities are claimed and in many cases the findings are only one of many which must be given consideration, yet in others nothing can take its place and an infallible diagnosis can be made only by its use.

Prostate. In diseased conditions of the prostate gland, there is no means of diagnosis more usful than the cystoscope in estimating the size, conformation and pathological conditions. In hypertrophy, the exact position of the obstruction, whether of prostatic bar or single median lobe enlargement, lateral or anterior lobe obstruction may all be determined prior to operation.

Bladder. Inflamation of the bladder, ulcer, tumors, diverticula and stone are readily brought into view and treated, either through the instrument itself or the treatment along other lines indicated. Segments of tumors may be excised for microscopical examination, if this is deemed a wise proceedure, they may be removed by the proper instruments through the cystoscope or fulguration carried out.

In the presence of stones, the number, size, situation, attachment if any, whether or not encysted and origin may be determined and the mode of removal indicated whether by crushing or by cystotomy. After a crushing operation, a cystoscopic examination should always be made and often reveals a portion of unremoved stone after it is supposed that the operation is complete.

The varied conditions in cystitis may be viewed directly and in conjunction with the chemical and microscopical examination of the urine, is of great value. Few of us would care to treat an inflammatory or catarrhal condition of an accessible portion of the body without an ocular examination.

The great majority of cases of tubercular cystitis are secondary to renal tuberculosis and may be studied together when the bladder lesions such as tubercles, nodules and ulcers are brought to view.

Urinary Disturbances. Frequency of urination may be caused by many other conditions than cystitis, such as swelling of the trigone, foreign body in the bladder, reflex symptoms associated with pyelitis, renal stone or other foreign body in the ureter. Under these circumstances the condition of the bladder, abnormalities of the trigone, foreign bodies or tumors, extra-vesical tumors and diseases of the ureters and kidneys can all be determined by the cystoscope with greater accuracy than by any other means, not excepting exploratory operation.

Chemical examination of the urine especially when pyuria and hematuria are present, should be checked up by the cystoscope to determine their source. It

is highly essential to know whether a pyuria has its origin from a posterior urethitis, abscess of the prostate, cystitis or stone in the bladder or whether it is of renal origin.

Hematuria may arise from the urethra, bladder or kidney and unless there is some definite symptom pointing to the source of bleeding, such as an injury or some acute, localized disease, it is not possible to trace accurately the source of the hemorrhage. This can usually be accurately determined by the cystoscope although further examination may be necessary to find the exact cause.

Ureters. The cystoscope has rendered possible the study of the ureters and such conditions as dilatation, stricture, obstruction due to diesease, calculus, tumors, etc. When at the mouth of the ureter, the stone may be seen and when above this its location is found by the ureteral catheter, especially the wax-tipped catheter.

Ureteral fistulae may occur as a result of traumatic or operative injury or follow necrosis from deficient blood supply. This may be diagnosed by the passage of the catheter or by observing the rhythmic contractions of the ureteral sphincter, whether present or not as the fistula will cause partial or total cessation of the flow of urine.

Kidneys. It is in diseases of the kidneys that the most valuable indications for cystoscopy are found and by its aid we are able to determine functional derangement and judge the need and feassibility of surgical interference. We are able to learn the presence or absence of a third kidney or of a second kidney, kidney or pelvic deformities, locate fistulous openings between the bladder and kidney and aid in pelvic operations outside the urinary tract by placing catheters in the ureters as a guide and thus protect them from injury during the operation.

Tests of renal function while not all infallible are now regarded as being very essential in obtaining information of the condition of the kidneys both from a medical and a surgical standpoint, the most important being cryoscopy, the phthalein test, phloridzin test, indigo-carmin test and others of more or less value. These tests are relative not absolute and their value is to be weighed in connection with other diagnostic methods. While some of these tests can be made without ureteral catheterization, it is obvious that no differentiation is made between the two kidneys.

Observation through the cystoscope will show the presence, absence or deviation from normal, of the excretion of urine through the mouths of the ureters as well as note the passage of pus or blood when in considerable amounts.

Hydronephrosis. In hydronephrosis the rhymic contractions of the ureter opening are weak and irregular, the urine sometimes dribbling away as in overdistention of the bladder, the urine dribbles from the urethra in prostatic obstruction. On passing the ureteral catheter, an obstruction is met, causing pain and when forced forward gently passes with a jump and when the dilated kidney pelvis is entered, the urine flows rapidly in a continuous stream until completely empty.

Pyelitis. Along with the history of the case and urine examination, the cystoscope and ureteral catheter will establish the diagnosis. The mouth of the ureter is dilated and congested, the urine comes from the ureter in steady drops instead of spurts and the catheter shows the pelvis dilated and containing residual urine.

Pyelo-Nephritis. Cystitis is present,

ureter opening congested and swollen, no obstruction to the catheter due to the disease itself and functional activity is lessoned.

Pyo-Nephritis. This is usually chronic, the bladder may be normal except at the ureter opening, the flow is less forceful and pus is seen mixed with the urine. The ureter is usually dilated and the catheter usually shows purulent, residual urine in the renal pelvis.

Tuberculosis. Cystoscopy is an extremely important means of establishing not only diagnosis but the character and stage of the disease, the extent and location of the lesion and shows definitely the functional activity of both kidneys. The principal points in making the diagnosis are the changes in the bladder and the meatus of the ureter, the amout of urine and its character and strictures of the ureter due to thickening and infiltration together with the microscopical examination.

Renal Calculus. Here the diagnosis is made by both cystoscopic and X-ray examination, the latter being more valuable in most instances. The ureter catheter, with or without the wax tip, is of less importance than the X-ray, but gives confirmatory evidence of value, the chief being to establish the condition of renal activity and the presence of stone in the ureter or bladder. When a calculus is passing through the ureter, it is most important.

The use of the opaque X- ray catheter in the ureter while the radiogram is being taken is of great importance in making the diagnosis of stone high up in the passage.

Hemorrhagic Diseases. By the use of the cystoscope we are able to exclude the bladder as a source of hemorrhage and the blood, if in appreciable quantities, can be seen coming from the mouth of the ureter.

Radiography. As has been mentioned, the X-ray in conjunction with the cystoscope and ureteral catheter, are very important means of diagnosis. Abnormalities of the ureters, pelvis and kidneys can be accurately determined after an injection of some suitable solution such as collargol or thorium and an X-ray picture taken.

Congenital malformation of the kidneys, pelves and ureters, ptosis of the kidney, tumors, hyronephrosis, pyonephrosis, tuberculosis, renal and ureteral calculus, anomalies of the ureters, fistulae, etc. can be readily demonstrated by this method.

Treatment through the cystoscope. In the bladder, topical applications may be made, foreign bodies, if small, removed, if large suprapubic operation is obviously necessary. Lavage of the renal pelvis is indicated in chronic catarrhal affections if the parenchyma of the kidney is not involved. Drainage of the pelvis in hyronephrosis and pyonephrosis and injection of hemostatic fluids, such as adrenalin, in hemorrhage from the kidney, are recognized proceedures.

Small vesical calculi can be removed when small or friable enough to break easily, by the use of special instruments through the cystoscope; strictures of the ureters may be overcome by graduated bougies in connection with electric current (d'Arsonval); ulcers may be excised, cysts incised and ureter openings enlarged by a special knife in cases of impacted stone.

High Frequency. This is the most satisfactory treatment of papillomata of the bladder and other new, benign growths. It is also effectual in the control of bladder hemorrhage either from benign or cancerous areas. In hypertrophy of the prostate, the current may

used with good effect in cases with median bar obstruction, fibrous contraction of the neck of the bladder and as a palliative treatment in inoperable cases.

Special value to the surgeon. The cystoscope in the hands of a competent operator is of the greatest diagnosis value to the surgeon in operative conditions of the urinary tract and female pelvic organs. Catheters placed in the ureters prior to operation are a guide to their location and often essential in preventing their injury in hysterectomy and other abdominal operations. Radiograms either with opaque catheters or after the injection of thorium solution are of great assistance to the surgeon in both diagnosis and treatment.

While the cystoscope is not of equal value in all the conditions mentioned, yet it must be perfectly obvious the great field that has been opened up by its perfection and that it is destined to still greater use in the future.

LABORATORY METHODS AS AN AID IN THE DETECTION OF DISEASE.

By Dr. Charles E. Gabel
Director and Bacteriologist, State Hygenic Laboratory
Charleston, W. Va.

Read before West Virginia Medical Association, Clarksburg, May, 1919.

In ancient times and among primitive people's physicians observed various abnormal conditions of man which they called disease. The pathological conditions of the human body manifested themselves by certain outward signs or symptoms which the disciple of Aesculapius tried to combat and prevent. As these outward manifestations of a disordered organism often reappeared, he later learned to seek the cause of the trouble and to get at the root of the evil. To do this he found that more detailed knowledge than was available was necessary, and accordingly further studies were made of the gross and minute structure of the body, of its actions as a whole and in parts under both healthy and diseased conditions. The physical and chemical phenomena occurring within it were gradually elucidated with the advance of science, and some thought all physiological processes could be explained by them. Others seemed to think some vital force was necessary besides. Theories and speculations were numerous and most of them were neither proven nor disproven.

In medical as well as other science men followed certain recognized leaders and let their thoughts and actions be governed by their influence. Later they learned to doubt the opinions of others and to put their questions directly to nature for an answer. This search for the truth at the fountain of knowledge was the beginning of experimental science. The relations of cause and effect were determined as well as the influence of varying environmental conditions. These were seldom all at hand, and in order to obtain them laboratories were developed, stocked with the needed apparatus and reagents, and with books in which the knowledge and experience of other men were recorded.

Some new and wonderful results are obtained with a simple and inexpensive appliances. While visiting the University of Besancon, France, where Pasteur used to teach chemistry, I saw the crude incubator with which he made some of his classical discoveries. In addition to having a broad knowledge, Pasteur was a genius. He did not wait for nature to

reveal her secrets but put her, as we might say, through "the third degree" in his laboratory. However, some new facts were found as the results of accidents or mistakes. In seeking a remedy for chicken cholera Pasteur thought that perhaps by inoculation of the living causative organism he might produce immunity. By mistake he used an old culture which we now know had become attenuated by age. This culture, however, gave the immunity he was looking for while the fresh virulent culture did not. Similarly the X-rays were found by Roentgen, not because of logical deductions, but by an accident. Yet it is not advisable to encourage the making of mistakes, as a scientist of international reputation is said to have made the mistake of using in place of a vaccine a virulent culture of B. Pestis with fatal results. When the phenomena of natural forces are revealed all eyes that see do not comprehend; it takes brains to interpret our sensations correctly and a great mind to see and discover new underlying principles or to make practical applications of them.

While some new things seem to come as a flash, others are the results of long and arduous thought and experiment. For example, salvarsan received its numerical appellation from the fact that it was the 606th preparation which Ehrlich had made in trying to perfect the product. Evidently somebody thought he could discover some use for the intermediate products, for while I was at the Bureau of Science at Manila I found a large number of them; however, I never heard of any practical use to which they could be applied. Much time and labor in research work sometimes seems to be spent in vain. Occasionally there are useful by-products or the work forms a foundation in vain. Occasionally there are useful by-for a more valuable superstructure. An example of this follows: It was found by experiment that if foreign cells are successively injected into an animal body, that body acquires an immunity to them. Metchnikoff claimed that phagocytosis disposed of them. In order to find out just what happened, Pfeiffer, after giving one guinea pig repeated injections of the cholera vibrio, inoculated it and a control guinea pig intraperitoneally with a fatal dose of the germs. From time to time some of the peritoneal exudate was withdrawn and examined in a hanging drop microscopically. It showed what is now known as Pfeiffer's phenomena, viz. the bacteria in the exudate from the immunized animal graduallly lose their motility, change form, break up into granules, and after several minutes seem to dissolve. This lysis does not occur in the normal animal, as its exudate shows motile virbrios which increase as time passes until finally the control animal succumbs to the infection. By immunizing with living or dead typhoid bacilli we now usually demonstrate this phenomenon of bacteriolysis to our medical students. Similarly we can produce antibodies or cytolysins to other cells. I will mention only the blood cells on account of their practical importance. Their dissolution by antibodies is known as hemolysis. In all these lytic processes three elements must be present: 1: the cells which are called the antigen; 2: the substance which their presence provokes or the antibody, and 3: a thermolabile substance present in animal body fluids which the French called alexin and Ehrlich called complement, by which name it is now generally known. He tried to show that the complements exist within one individual serum. Metchnikoff believed that each serum contained at least two complements. Bordet, also basing his opinion on numerous experiments denied the multiplicity of

complements in a given serum and contended that it contained only one alexin. These contentions and experiments may have seemed to be of little practical importance at the time, yet they were of fundamental value for establishing the most important method of serum diagnosis, viz. complement fixation. Bordet and Gengou demonstrated that if typhoid bacilli (antigen) is mixed with an inactivated typhoid immune serum (amboceptor) and normal serum (complement), they unite and bacteriolysis occurs. Then if erythrocytes and inactivated homologous immune serum are added, no hemolysis occurs, showing that the complement is bound whereas the same complement will cause hemolysis if the typhoid amboceptor is omitted from the mixture. This reaction is strongly specific and can be widely employed. It is used mostly now with the gonococcus and tubercle bacillus as antigen. After Wassermann and Bruck had experimented with the complement fixation test in tuberculosis and Ehrlich gave plausible explanations with his side chain theories, its application to the diagnosis of syphilis was tested. Here, however, no bacteria or preparations like tuberculin could be used as antigen. Syphilitic human organ extracts were employed, and by using amboceptor from monkeys, complement fixation was demonstrated. It would take too much of your time to trace the development of the Wassermann test and state the various modifications it has undergone. Suffice it to say that if this test is carefully done it yields results which can not be obtained otherwise. However, it depends for its success on the presence of antibodies in the patient's serum. It is of no value shortly after infection. When the chancre appears the sooner a dark field examination is made of scrapings from its edge the more easily will treponemas be found. Although the latter stain with difficulty they can be demonstrated by Giemsas or by Goldhorn's Method. However, an India ink smear is usually used. As the disease progresses the microscopic findings gradually become less and the serological results become more important until after a month the percentage of positive results is nearly one hundred.

A similar antibody formation occurs in the patient after typhoid or para-typhoid infection. The agglutinins can be recognized by the Widal test usually after the first week. Physicians often send in blood specimens for a Widal diagnosis too early in the course of the disease to get positive results. Widal and Lesourd found that the complement fixation test gave positive results more frequently and earlier with the serum of typhoid patients than the agglutination test. However, as the typhoid bacilli circulate in the blood after infection the best method of demonstrating their presence is to innoculate 5 to 10 c. c. of blood in bouillon or bile and test the resulting growth with typhoid immune serum. Convalescents and contacts should have their feces examined to determine the presence of carriers. However, this procedure does not seem to be popular in West Virginia. But samples of sputum are received in large numbers, sometimes not in the right containers or in the right condition. Too many food particles are often present. Examinations for the types of pneumococci and streptococci should sometimes be made. Although microscopic findings in addition to the clinical evidence usually decide the case, in doubtful cases animal inoculations would give more reliable results. The same is true in an examination for rabies. Heads of dogs suspected of hydrophobia are sent us sometimes, and by the time

the Express Company has delivered them the ice in which they were packed is melted and the brain is not in a fit condition. A better way would be to remove the brain when the animal is killed and send it packed in glycerine which preserves it.

As you are all more or less familiar with the routine laboratory methods and the work of the State Hygienic Laboratory, I shall not consider the various procedures, but make a few remarks in general. Some specimens which we receive that might be improved upon are smears of pus. The amount of material sent is at times so scanty that a fair examination can not be made, at other times it is so thick that the smear is opaque. Instead of heaping it on one spot it should be spread. Occasionally pus or blood is sent between two slides without first drying in the air. We recently received a smear from an inflamed eye to be examined for gonococci. The Neisser organism was not found but the Klebs-Loeffler bacilli were numerous. Some specimens still go to Morgantown when the physicians fail to cross off that name in all places where it occurs on the old containers. One swab to be examined for diphtheria had also taken this trip before reaching us. We received it a long time after it had been made, yet were able to obtain a growth of diphtheria bacilli from it, a good demonstration of how resistant that organism is to drying. Although the microscopic examination of this bacillus if a favorite laboratory procedure, its morphology gives no conclusive evidence of its virulence. Fermentation reactions help some but the only true test of virulence is animal inoculation. But as other things have become scarce and increased in price during the war, so also have laboratory animals. Guinea pigs can be obtained at from one to two dollars a piece, rabbits cost slightly more. Schick some years ago showed the value of intradermal inoculation of diphtheria toxin to determine whether a person possesses sufficient natural immunity, yet today I think this test is seldom used in West Virginia and antitoxin often is injected when not required.

As the older physicians sometimes used "shotgun" prescriptions in the hope that one of the ingredients would be the right one, so the modern physicians are sometimes compelled to use vaccines. A better practice. if circumstances permit, is to have an autogenous vaccine prepared. We recently had an inquiry as to the price charged per pint for autogenous vaccine. For making vaccines as well as other modern diagnosis determinations a properly equipped laboratory is necessary, as well as sufficient time. I have often wondered how some hospitals which I have seen could get along with the laboratory or rather lack of laboratory facilities in them. However valuable is the clinical diagnosis of disease it has its limits as well as do laboratory methods.

As the scalpel has revealed the tissues hidden beneath the skin and the microscope has shown us a hitherto unknown and invisible world, so the various appurtenances and methods of the laboratory have enabled us to better recognize and combat our common foe—disease, a monster often more exacting than Mars. In war it is an advantage to know your enemy and his habits, the more you can learn about him the better will you be able to meet his tactics. The same is true in fighting disease or the organisms which produce it. Before you can hope to combat them successfully you should know what they are, where located and how best attacked.

Studies and tests made in the laboratory or in the field are an aid in this work and have grown wonderfully in recent years. Formerly we looked to Europe, but now America as the most prosperous country must take the lead. West Virginia has established a splendid Hygienic Laboratory and we are trying to do all the good we can for the people of the state with the time and money at our disposal. Although some feel satisfied, we think we are only at the beinning of the good work along that line and expect to see it grow and increase in usefulness.

Owing to the slowness of mail or express service, reports of analyses are sometimes not received as soon as desired. This may be partly remedied by sending specimens by Special Delivery and asking for a telegraphic report which will be sent C. O. D.. It has been suggested that branch laboratories be established in the State. However advisable that may be, it can not be done until the people show a greater appreciation of public health work by making sufficient appropriations. Meanwhile it would seem advisable for the larger cities to have municipal laboratories. Some physicians do not seem to know yet what work the State Hygienic Laboratory is prepared to do, and send their specimens to laboratories with which they are acquainted in other states. We shall be glad to have physicians who come to Charleston pay us a visit and get acquainted with the facilities we have for doing their work. Thus far we have not undertaken pathological work such as the sectioning and diagnosis of diseased tissues. Toxicological work and the examination of foods and drugs for poisons is done by Prof. William H. Schultz, at the State University at Morgantown, our consulting pharmacologist, with whom such matters should be taken up directly. For private work such as the chemical examination of urine we charge a fee. We have been asked why this is done since the sender pays taxes for the support of the State Health Department. The reason is because that Department was established primarily to protect the public health by preventing outbreaks of infectious diseases and properly controlling them when they occur. The community is not much interested in, for example, what a patient's blood may be, and consequently do not contribute to the payment of such examinations. If they did, taxes would necessarily be still higher. The fees charged for private work help to meet the extra expenses of the health department when making such examinations. They will not necessarily be done immediately but when circumstances permit. A list of such examinations follows:

Price List of Examinations Made By The State Hygienic Laboratory Charleston, W. Va.

SERO-DIAGNOSIS—	
Wassermann Reaction	$3.00
Widal Reaction	2.00
Blood Cultures	5.00
CEREBRO-SPINAL FLUID—	
Bacteriological examination with cell count	3.00
Wassermann & Langes Colloidal Gold test	5.00
MICROSCOPICAL EXAMINATION FOR TREPONEMA PALLIDUM	2.00
GASTRIC CONTENTS ANALYSIS	3.00
SPUTUM EXAMINATIONS—	
Microscopic examination	2.00
Cultural examination	3.00
Animal inoculation	7.00
URINE ANALYSIS—	
Partial	1.00
Complete	2.00

Bacteriological	3.00
BLOOD ANALYSIS—	
Erythrocyte count	2.00
Leucocyte count	2.00
Red and white cell count	3.00
Differential count of white cells	5.00
Examination for Malaria	4.00
FECES—	
Cultural examination	5.00
Examination for animal parasites	2.00
AUTOGENOUS VACCINES	5.00
MILK—	
Chemical examination	4.00
Bacteriological examination	4.00
WATER—	
Chemical examination	10.00
Bacteriological examination	2.00

All examination made for public health purposes, however, when the specimens are sent in by physicians or county health officers, are made free of charge. A list of them follows:

Free Examinations Made by The State Hygienic Laboratory

Wassermann blood test and smears from chancre or chancroid and bacteriological, serological and microscopical examination of cerebro-spinal fluid for charity patients. Blood cultures and Widal reaction for typhoid or paratyphoid fever. Sputum examination for tubercle bacilli. Cultural and microscopical examinations of feces for the typhoids and animal parasites. Microscopical examinations for diphtheria and gonorrhea.

Outfits for sending in specimens may be obtained from the various stations or county health officer or obtained directly from the State Hygienic Laboratory.

If an animal suspected of rabies has bitten a human being, it should not be killed but kept under observation for two weeks. If it dies during this time its head should be removed and sent to the laboratory packed in ice in a water-tight container, or preferably the brain should be sent preserved in glycerine.

For the prevention of ophthalmia neonatorum, outfits containing a solution of 1% of silver nitrate will be sent to physicians on request.

Bacteriological and chemical examinations will also be made of milk and water when in the interest of the public health.

THE TREATMENT OF UNUNITED FRACTURES.

DR. A. J. NOOME
Wheeling, West Va.

Read by title at annual meeting West Virginia Medical Association, May 20, 1919.

On this ever-present injury, examples of which are probably more numerous now than they ever have been in the history of the world, and let us hope than they ever will be again, Groves (British Journal of Surgery, October, 1918) contributes a paper of great value based on personal experience dealing particularly with a series of 60 consecutive cases. The obvious causes for non-union are primary loss of substance, comprising 34 of his 60 cases; necrosis and secondary loss of substance, 3 cases; displacement with infection of the soft parts, 21 cases; and eburnation or sclerosis, 2 cases. Whatever may be one's conception as to osteogensis, it is obvious that in the adult a gap in one of the long bones remains unfilled by new bone in a large number of cases. Neither the periosteum nor the cutting ends of the injured bones produce any appreciable callus repair, nor does there seem to be the slightest evidence of restruction of the disphysis in the adult bone when a

considerable portion of it has been removed. In some of these cases it was obvious that the bone had been very freely sacrificed by attack, as shown by the clean, sawn ends. Doubless rapid, clean healing has often been promoted thereby, and limbs or even lives have been saved that otherwise would have been lost by more conservative methods; but it should be borne in mind that resection of bone does almost inevitably lead to ununited fracture which causes loss of function and requires difficult and uncertain operative treatment for its final restitution.

In addition to the 60 cases studied Groves has seen a large number of fractures the union of which was delayed by sequestra and in which rapid union took place after the removal of the dead bone. This leads to the conclusion that whilst primary removal of all loose fragments is likely to cause ununited fracture, if the case is freely drained and properly immobilized and left until the dead bone is properly differentiated from the living before the removal of the sequestra, natural union will generally occur. Indeed, the cases of comminution heal with greater rapidity than those of a more simple nature. Always supposing that free drainage has been secured with the removal of gross dirt and septic parts of objects, the leaving of bone fragments in the comminuted fracture is the shortest way of securing rapid and natural repair; removal of these fragments is the surest way of producing an ununited fracture. If the fragment be absolutely loose and with no soft parts of any kind, it is obvious that it should be removed from the septic wound. In four to six weeks the x-ray affords a ready and certain method of distinguishing between dead and living bone. All the living bone becomes rarefied, while the dead bone retains its original opacity.

The radius, ulna and humerus are the three bones which oftenest exhibit loss of substance. In the case of the former two, when one of them is intact, the explanation is that contraction cannot take place. With the humerus it is the weight of the arm which prevents contraction, and it is not easy to devise a suitable splint which will obviate this whilst allowing for a daily dressing. The tibia is not so frequently the seat of an ununited fracture from loss of substance because usually the fibula is broken either primarily or secondarily, and this allows for the apposition of the broken surfaces. In case of a small gap in the tibia with a large anterior wound which will make grafting difficult, it is well to do an osteotomy of the fibula at an early stage so as to get the tibia fragments together before sclerosis has occured. The femur is rarely the seat of ununited fracture due to a loss of substance, because the strong contraction of the thigh muscles brings the bone ends together. If the loss is not more than 1½ inches, and if care be taken to secure correct alignment mode of cure should be encouraged.

Necrosis is a common cause of delayed union, but a rare one for non-union. The line of treatment to be adopted in these cases is first removal of dead bone and grabulation tissue, postponing any reconstruction operation until six months after healing has occured, by which time nearly all of such will have undergone spontaneous union. Necrosis very seldom affects the end of the main fracture. Non-union of fragments of fracture results from displacement for the same reason that it does from loss of substance. In each case the bone surfaces are removed too far from one another for the callus to bridge between them. The most frequent form is overlapping, in which broad contact between the frag-

ments is retained, and it is usually followed by union, even if there is shortening; but if there is marked angulation, then the bone fragments become separated by the intervention of soft tissues and callus bridging is prevented.

In Groves's cases unusual displacement was most conspicous in fracture of the femur. In many cases displacement was due to the limb not having been correctly immobilized in the first place. It should be placed in the natural position of muscular relaxation, with the hip and knee semiflexed and the thigh abducted. In this way can the main fragment best be brought into line with the upper piece. It is tilted forward over the lower piece, which is tilted backward. If in this position efficient pin extension be adopted, full lenght as well as alignment will be attained. A displacement of the shaft of the radius in which the distal fragment is pulled inward and is liable to be attached to the ulna is a fairly common type. This condition usually requires a reconstruction operation.

As to eburnation as a cause of non-union this is probably due to a feeble circulation in bones where there is a constant muscular strain and often follows plating which holds the bones apart rather than bringing them in direct contact. Groves believes that neither sepsis nor mobility should be ranked among the causes of non-union of fractures, though it may at times be attributed to either of these causes or both. Indeed, he holds that mobility, provided it does not dislocate the ends of bones in contact with one another, actually encourages rapid union. In this relation, Groves calls attention to the circumstance that if the excision of an ankylosed joint is performed ultimate mobility, that is non-union, will be best secured by absolute rest for several weeks followed by only the gentlest of movements. On the other hand, if anything like forcible movements be undertaken at an early stage then reankylosis will probably occur.

As to the natural course of ununited fractures, if the ends of the bones are separated by a considerable distance either from loss of substance or by displacement, it is almost certain that union will never occur; this for two reasons: first, that new bone is not laid down in adult tissue except as a thin layer covering the bone wounds; and second, that these wounded bone surfaces soon become wrapped round in a dense avascular connective-tissue envelope which seals up the little osteogenic impulse which first existed. It must be admitted however, that it is extremely difficult to be certain about the behavior of the bone in any given case, so that it is always wise to wait for a long time before deciding that union is not going to occur by natural means. During this waiting period the various well-known methods of stimulating osteogensis may be tried. These are—in their order of usefulness movement, passive congestion, percussion, and injection of various fluids.

There are three methods used for the fixation of the graft: the first of these methods will almost invariably succeed in producing union in all cases in which there is actual bone contact between the main fragments, supposing that their application has not been too long delay ed. They are puite useless, however, in regard to osteogensis when there is a large gap between the bone ends, though they do something to preserve vascularity and function.

In all doubtful cases—i. e., where the separation of the bone fragments is definite but small-decision between expectant and operative treatment must de-

pend upon the amount of deformity which will result from the former, and the prospect of correcting it by the latter. So long as infection or its results have to be got rid of, and there is definite evidence of recovery of continuity by the bone and of function by the muscles, then the time of waiting is all a gain. On the other hand, if there is no continuity restored in the bone, and this applies especially to single bones, e. g., the humerus or the femur, then prolonged waiting does definite harm. This is due to two circumstances: First, the bone itself undergoes changes which are prejudicial to a reconstructive operation; the fragments always suffer from atrophy or scelerosis, and in each case this involves a diminution both of vascular supply and of bone-forming cells. Secondly, the soft tissues all suffer from the loss of their normal skeletal support; the muscles waste and lose their function, and the nerves are often so dragged upon as to be incapable of condition.

Passive congestion is a method of the greatest possible value in expediting the healing of a fracture. It may be applied in two ways: either by tying a piece of drainage tube above and below the seat of fracture (Thomas); or by the use of a flat rubber bandage applied above the injured portion of the limb (Brier). Each method has its own advantage. Thomas's method produces a more local congestion, but in the forearm and below the knee it has the draw-back of tending to displace the parallel bones toward one another. Brier's method produces a more massive congestion, but requires more skill and judgment in its application. It is especially suitable for the forearm or leg bones, and for any case with extensive wounds.

Another method which acts by encouraging local congestion is the application of a light plaster-of-Paris bandage, provided with a window opposite the wound. This should be applied with the limb raised, and when it has set the limb is lowered and used. Local edena of the parts at the window is produced, with a temporary increase of discharged. The limb can be used, and this promotes the circulation and also some frictional stimulation of the bone ends.

Deep and percussion massage should be used in all cases in which mobility at the seat of fracture persists unduly. The presence of pain during manipulation is a useful guide in this matter. In the early stages of normal fracture recovery, any attempt to move the bone is accompanied by pain, and such should be most carefully avoided. Later on, however, if the fracture has assumed an indolent condition, manipulation is painless; and this is an indication that deep massage, and even friction of the bone ends together, should be carried out.

The role of movements in the treatment of fracture has been emphasized quite rightly by Lucas-Championniere. But movements must be regarded by two conditions; they must be painless, and must not tend to displace the fragments from one another or to alter the alignment of the bone. Passive and active movements, most carefully adjusted for each case, should be carried out as soon as these can be done without causing pain or moving the fragments. Then, when a fair degree of consolidation has occured a suitable case splint is applied and functional movements encouraged.

The great danger of early mobilization of fracture lies in the liability to the bending of soft callus union, and this should be recognized and prevented by suitable splinting or posture.

There are four situations in which this danger should always be guarded

against; In the upper end of the humerus the bone becomes angulated outward, and this can be prevented by keeping the arm in abduction frame. In the radius there is always a tendency to pronation, which must be prevented by a supination splint taking its bearing above the elbow-joint. At the upper end of the femur there is a tendency to angulation outward, and this often persists in gunshot fractures for twelve months after the orginal injury. It must be fully corrected in the first place by efficient extension in a position of flexion and abduction of the thigh, and then maintained by some form of rigid metal splint on the outer side of the leg, which is firmly fixed above to the pelvis and below to the condyles of the femur. There is a tendency to a backward sagging of the middle of the femur in fractures of the shaft of that bone. This again, must be first corrected by suitable cradling combined with extension, and then maintained by a light ease splint suitably supported to the opposite shoulder. A rule of safety is to use a walking caliper splint for all gunshot fractures of the femur for six months after union has taken place.

There have been many proposals to attempt callus stimulation with bone suture. They consist in needling the bone ends, injection of blood or of fibrin, the insertion of magnesium, or the drilling of the fragments. No doubt all these have a certain value, but from a practical standpoint in dealing with really ununited fractures they are unsatisfactory, Based upon experimental evidence they are liable to fail, for the condition of an ununited fracture are different from those which obtain in experimental conditions; that is to say, there exists a sclerosis both of the bone and soft parts in ununited fractures which is not present in animal experiments. Clinically, therefore, these methods either do too much or too little; they are superfluous or they are futile. If sclerosis of the tissues if not present, then the methods of congestion, deep massage, and limited movement will suffice; if it does exist, and if an open operation is necessary, then something more certain is indicated. Multiple drilling of the bone fragments after removal of the scar tissue is certainly the best of these callus-stimulating devices; but it will only succeed where there has been no loss of bone substance and no gap to be filled.

In every case of ununited fracture there is one of three principal causative factors—either a gap in the bone, an interposition of soft parts, or an indolence of the bone ends. The last-named factor is one of great importance, because it arises in every case sooner or later, whether it is a primary condition or not. It may actually arise from the other two conditions, namely, want of continuity or the interposition of soft parts, or it may be caused by septic inflammation, which brings about a filling up of the vascular canals of the bone and a covering of its surface with scar tissue. Indolence of the ends of a fractured bone may take the form either of atrophy or sclerosis. Atrophy is most conspicuous when there is a gap in the continuity of the bone, sclerosis when there has been marked septic inflammation, but in either case the condition of the bone ends with which it is desired to bring about union is very unsatisfactory. Either there is a shaft of a bone which consists of a mere thin shell filled with fatty marrow, or else there is a dense avascular substance which is best described as bone scar tissue. Such bones will not throw out callus in the normal way, however, they are treated, and all the non-operative methods of treatment are therefore

likely to fail. Similarly, other methods which merely aim at suture of the bone, without providing for the removal and replacement of this unhealthy tissue, will also fail, and this must be one of the carinal facts to be borne in mind in the consideration of all operative procedures.

Whatever may be the possibility of sterilizing wounds of the soft parts and of the bones in the early stages of their existence, this possibility has vanished at a late period.

We have long been familiar with the idea of latent infection, particularly in the case of tuberculous diseases was often only a comparativeterm, and that any violent traume such as that entailed by wrenching a tuberculous joint recrudescence of the infective disease. Just so it is with limbs which have for weeks or months been subject to pyogenis infection. In proportion, probably, to the length of time that infection is known to have existed will be the period necessary for the infective agent to be eliminated, even after the outward signs if infection—i. e., inflammation or an unhealed sinus—have disappeared. The probability of latent infection and the length of its duration in any given case is in proportion to the extent of the primary wound and its degree of infection; the amount of scar tissue deposited in the tissues:; the length of time during which manifest infection is known to have been present; the extent of bone involvement. This latent infection will be slight and transient in a clean through-and-through wound which has quickly healed, and it will be great and of long duration in an open lacerated wound which has slowly healed with a deposit of much scar tissue; and of all wounds, those which have opened up and comminuted with large tracts of bone tissue will be those which harbor latent sepsis the longest.

It has been generally accepted that a period of three months should elapse between the healing of a septic wound and the undertaking of any reconstructive operation. This may be a good working rule, but should be regarded as a minimum, to be increased when there has been a large wound, much scar tissue, and much bone involvement.

Second only in importance to autogenous infection by latent sepsis as a cause of failure is the presence of large masses of scar tissue on the surface and in the depths of the wound. Probably the infective agents become encapsulated in the scar tissue, just as happens in the healed tuberculous foci of a phthiscial lung. Not only is scar tissue resulting from a septic wound to be regarded as a germ envelope, but also it is a tissue of very low resistance of extraneous infection. The most striking evidence of this is afforded by the behavior of cutaneous scars after operations. The wound heals by first intention, but if a large skin scar has been left to cover the tissues, then, within a few days, this gives way in part, or altogether melts away, leaving a superficial ulcer. But after all the skin is only the visible aspect of the scar, and the deep scar in the soft tissues and the bone—whether at the ends of the main fragments or as isolated pieces—must also be regarded as tissue of poor vitality, deficient circulation, and weak resistance. The ideal principle to be arrived at is to remove all this scar tissue before attempting to reconstruct the bone. In practice it is usually the best plan to do one or more preliminary operations for the substitution of the skin cicatrix and the soft tissue scars. It is best in the case of a large skin wound to take a pedicled flap from the chest (in case of the arm) or from the opposite leg (in case of the lower member), and

to cut the pedicle in from seven to ten days. The deep scar is removed at the same time, as far as possible in one mass, the surrounding muscles being then brought together to obliterate the dead space. This secures a thick, fatty skin—covering for the site of the future bone operation. It is better to leave the removal of bone scar—i. e., the ends of the main fragments—until the actual reconstructive operation is performed; but loose bits of bone should be taken out with the fibrous scar tissue in the preliminary operation, on the two grounds that they are often the seat of latent infection, and that, being quite indolent and avascular themselves, they only tend to prevent vascularization and bone growth at the site of the reconstructed bone.

It happens only too often that, after a long period of waiting for sinuses to heal and for latent sepsis to disappear, the general nutrition of the limb has suffered and the muscles atrophied to such an extent that a very poor prospect is offered for bone repair. Under such circumstances it is very doubtful whether it is justifiable to operate, and the question arises whether nutrition and function can be restored before repairing the bone. Two kinds of treatment must be patiently pursued . On the one hand, the nutrition must be maintained and adhesions of the tendons and joints prevented by massage and electrical stimulation; on the other, an apparatus must be provided which enables fuctional exercise of the muscles to be undertaken, whilst preventing deformity. In principle, such apparatus consists in making a light splint casing for the limb, with joints at the natural articulations; being in reality the provision of a temporary exo-skeleton in place of the missing endoskeleton. When the muscles have recovered sufficient strength under this treatment to move the limb, and when the blue, cold member has become warm and of a natural color, then the bone repair may be done with good prospect of success.

There are two procedures commonly recommended for bone surgery which appear to have no sufficient justification, but to be open to grave drawbacks. One of these is the dependence on forcipressure alone for hemostasis. It is far better to ligate every bleeding point with fine catgut, for there is nothing more prejudicial to healing than the formation of a hematoma. The other is the dictum that the gloved fingers should not be put into the wound. If the hands are clothed with rubber and cotton gloves. Groves sees no reason to doubt the sterility of these any more than that of the instruments or swab. Moreover, complicated joinery cannot be well done without the help of the fingers. Accurate fitting and firm fixation are the two watchwords of operative bone repair, and for these fingers are necessary.

The freshly united bone must be kept without disturbing strain until firm union has occured. About this there can be no doubt; the only question which has to be considered is how this immobility is best secured in such a way as to interfere as little as possible with the circulation of the part and attention to the wound. If the bone repair has been done in a solid manner, then the actual fixation will be secured by this. On the other hand, if the parts, whether bone ends or bone grafts, have only been tied with soft ligatures, then reliance must be placed upon plaster-of-Paris dressings. The application of these two methods of fixation will become apparent when the special operations have been considered.

Naked grafts form new bone very slow-

ly and scantily; periosteal flaps in adults form no new bone at all; bulky grafts covered by periosteum are capable of depositing thick new bone in the form of an involucrum. From these facts it may be inferred that the osteoblasts are necessary for new bone, but that the protecting and vascularizing matrix of the periosteum is necessary for their activity.

The best source of the graft has been much discussed, but for the repair of the long bones the crest of internal surface of the tibia holds most advantages. From this bone the greatest length and strength can be obtained with the minimum exposure or damage to soft parts. It is well provided with thick periosteum, and is readily accessible for accurate sawing. From the crest may be obtained a strong bone ¾ inch quare in section, and from the surface a long thick plate 1½ inches wide, ⅜ inch thick. The only serious objection which can be urged against the use of the tibia is the fact that fracture sometimes occurs in it after the removal of a thick graft. This has happened in two cases but in each it was only a small fissured fracture without displacement. The fibula has some points to recommend it. These are, that it presents a rod-shaped bone which requires no cutting, and that it is not an essential feature in the skeleton; but it is very variable in its shape and size, and it is difficut to clear it of muscle without stripping it of its periosteum. With a proper motor saw a good graft can be cut from the tibia much more quickly than from the fibula, in the case of a muscular leg.

In determining the size of the graft two points must be borne in mind: First, that no new bone of any mechanical importance can be expected to arise from it for many months, and that it must therefore be cut large enough to fill the gap it has to replace as far as possible. Secondly, that as the graft ought to have contact with a wide face of bone bed on each side, it must be cut of sufficient length to secure this. The ideal length is not less than three times that of the gap. For example, if there is a gap of two inches between the main fragments after their unhealthy ends have been cut off, then the graft ought to be six inches long.

A further vital condition to be considered is that relating to the contact between the graft and its bed. Rapid and sound union will depend upon broad and accurate contact efficienly maintained, and it must be a main object of the technique to secure such contact.

There are three methods used for the fixation of a graft: Suture by ordinary absorbable ligatures; fitting by accurate joinery; fixation by means of metal screws, pins, wires or plates.

The first method, that of ordinary suture—i.e, of the periosteum of the graft to that of its bed—is only suitable for situations where is no tendency to movement or displacement. e. g., in the repair of sutures are really necessary. In the long bones. catgut or animal-tendon cannot be regarded as a serious method of fixation except for the attachment of the periosteum. If any strain has to be borne by ligatures in the fixation of a graft, then choice would be of some metal suture—e. g., a bolt or a pin; but failing such it is better to use a piece of the patient's own fascia or tendon than to place any reliance upon catgut or animal tendons. In the leg, strands of the fascia lata, and in the arm a piece of palmaris longus tendon, are far better suture materials than pieces of sheep's intestine or kangaroo tail.

The method of fixation always to be aimed at is that of fitting the graft into a slot or cavity in the bed in such a way as to require no suture at all. When this

can be well done the method never fails, provided latent sepsis has been eliminated and scar tissue removed. The simplest type of this fixation is seen in the use of a square tibial peg driven into the cancellous tissue of the femoral neck for fracture of that bone. In the same way the living intramedullary peg can be used as a graft for the repair of fractures in certain situation viz., the upper or proximal third of the femur or ulna. That is to say, in both these situations a peg can be firmly driven into the shaft of the bone so that graft and bed are firmly contacted in the whole length of the former. It must be carefully noted that this is a very different procedure from putting a living intramedullary peg into the site of a fracture, introducing it into one broken end and then bringing the other over it (as in the use of short pegs described above). This latter procedure is by clinical and experimental evidence likely to fail, because the peg is so short and the fitting so loose. In the firmly fitted the peg should not be round but angular in section. For example, in the femur the shaft is hollowed by a ⅜ inch drill, which leaves a margin of at least ⅛ inch of fairly soft bone all round the cavity. A square peg is cut from the tibia, 6 inches long and ⅝ inch thick, and then filed down so as to pass through a ½ inch hole. It then has a roughly octagonal section, and can be hammered into the ⅜ inch hole so as to hold very firmly, and 3 inches will lie on each side of the line of fracture.

There are two other methods by which a graft can be firmly fitted as an intramedullary peg, and these are specially suited for cases in which there has been a loss of substance. Suppose that the gap to be filled is 2 inches after removal of unhealthy bone from the ends of the fragments; suppose that it is the radius to be repaired, having an outside diameter of half an inch and an inside cavity of a quarter of an inch. The graft is cut square and of 6-inch length. Each end is shaped with a file for 2 inches, until it fits tightly the holes drilled in the fragments. Into one fragment the graft is driven (temporarily wrapping the bone round with several turns of wire to prevent splitting). The other fragment is cut for 2½ inches with a fret-saw, and the two halves are pried apart so as to take the spindle at the other end of the graft. Then this split end and the contained graft are sutured through two holes by suture or split pins. In the alternative method, which is to be used if one fragment of the bed cannot be split as above described, the graft, having been shaped so as to fit at each end, is itself cut into two portions by a Z-shaped incision. Each half is hammered into place, and then the graft fitted together and sutured or pinned.

The inlay cortical graft, which has been used and popularized by Albee, is a superficial graft, laid down in a slot cut for it in the cortex of the bone to be mended. The use of wire nails, screws, bolts, or plates as a method of fixation must be considered. And in this connection it is wise to hold a temperate and reasoned opinion which avoids impracticable extremes. The fact that wire, plates, and screws have often been unwisely used and caused trouble is not sufficient reason to reject metallic suture when this will afford definite advantages. That there is nothing essentially hostile to a graft in the presence of metal sutures is proved by the many cases in which success has followed this method of fixation. In 13 out of 19 successful cases in the present series metal suture were used. If it is admitted on the one hand that firm fitting without metal sutures is always the ideal method of grafting, it must be granted that firm

fixation by metal sutures is better than insecure fixation without.

Another point to be borne in mind is that the use of firm metal fixation will greatly simplify after-treatment, in as much as much less plaster-of-Paris immoblization is then required. In the forearm bones, for example, the limb is kept on a simple splint of a few days until the smooth healing of the wound is secured; then plaster is applied for any splint or plaster of any kind; and than by keeping the limb for months in plaster.

As to the results obtained in bone grafting in Groves's series of cases there were 34 cases of autogenous bone grafts; of these 10 failed, 5 were eventually successful after extrusion of the graft, and 19 were completelyl successful.

THE PRINCIPLES PRELIMINARY TO THE TREATMENT OF FUNCTIONAL NERVOUS DISORDER, WITH ILLUSTRATIONS

DR. TOM A. WILLIAMS
Washington, D. C.

M. Soc. of Neurolog. of Paris, Etc., Neurologist of Freedman's Hospital.

(Continued from last issue)

In the course of a few days she was asked to write her account of the way in which she viewed her own psychology, and this I append:

"After several years of intense suffering from supposedly physical causes, it is, to say the least, surprising to be told that I am the victim of fear, and that the fear recognized and removed, the physical symptoms will disappear. Of course, I know abstractly that fear is psychological and that it does produce physical reactions just as other emotions do, but I find it hard to convince myself that the fear of fainting on the street or in an audience, is in my case, the source of all the unpleasant and peculiar sensations I have in such a marked degree. It still seems to me that there must be something other than this vague intangible "Unknown quantity" that makes me tremble at the mere thought of walking a block or two. And yet that line of argument brings me back to the psychological phase, for I have spontaneously written that I tremble at the thought. I have almost resented the idea of anything psychic, for it has seemed to me like an admission of weakness or lack of willpower—but I believe I am gradually coming to see that mind has something to do with matter, even in my own case, and that distant as it seems now, the physical symptoms so uppermost and peristent may yield when I fully grasp the fact that there is nothing to fear.

A few days ago I heard what seems to me to be a very striking illustration of association of ideas. A man who had been in the trenches was riding on a trolley car here in Washington, when the current was short-circuited and the lights in the car suddenly went out, with the noise and buzzing sound that accompanies it. Immediately the soldier fell flat on the floor of the car, but before anyone could reach him, he had risen and seemed perfectly well. He then explained that ever since hearing the explosion of bombs and bursting of shrapnel in the trenches, any unusual sound or sudden noise produced the same shock, and wherever he happened to be, he instinctively threw himself flat on his face, for protection. This is, of course, an extreme case, but it is true that to a greater or less degree impressions are being constantly induced upon the human mind and no one can escape the influence of them. One of the most

familiar instances is that of actual illness produced in a perfectly well person by the power of suggestion which is so clearly brought out in the case of the lawyer in the "Harvest Moon." I have seen a happy, smiling baby draw down the corners of his mouth and finally cry real tears because someone had used a sympathetic pitying tone of voice in speaking to him.

The casual greeting "How are you?" sometimes sets up, in a sensitive person, a train of thought that brings with it a whole list of physical ills not thought of before. Much has been said lately about the *moral* effect of the presence of American troops in the European trenches aside from the real re-inforcement of man-power. Bishop Brent insists that the mere appearence of the American Flag on the battlefields of France, no matter how small a force of men accompained it, would be sufficient to hearten the whole French Army and send it on to greater victory. Instances of *the power of an idea* might be multiplied, but it is evident that the human mind is easily swayed by impressions. It seems to me important then to see just what sort of big ideas are dominating our lives and giving colour to our work.

About eight years ago, I had an experience which marks the beginning of a definite period of my life during which I have suffered in the most peculiar and distressing way. As I try to recall it now, I have a very clear mental picture of the church where I was at service, and also a very vivid recollection of the sudden overwhelming sense of illness and oppression and a great desire to get out into some less restricted place. However, with a great effort I did stay until the end of the service. I thought little more if it and attributed my discomfort to some slight physical disorder. But ever since that morning, I can truthfully say that I have never been in any public gathering when I felt at ease and thoroughly relaxed. Always I am restless and uncomfortable and fidget about, waiting anxiously for the moment when I can be free from the strain. Even through intensely interested in sermon, lecture or play, and regretting to miss a word of it, I am often so really ill that I have to leave quickly for fear of fainting or making a scene of some sort. I remember that several years ago a certain magazine published views of the interiors of the great opera houses of the world. Absured as it may seem, those pictures were frightful to me. I could not look at them without having the same sensations of space and height that I know so positively I should feel were I actually sitting there in the flesh. This is to me pretty convincing proof that the idea of fear is the real cause of all the symptoms which have become more and more exaggerated until at times I am really ill.

The same dread or fear of space it must be that mades me feel uncomfortable and unnatural when on the street, for I seldom walk half a block without swaying and dizziness and the certain conviction that at the next step I *must* fall.

This fear, in my case, was evidently set up that morning in the church and ever since I have supposed I neeeded medical treatment for some serious trouble, but now with the assurance that there is absolutely nothing wrong in my physical makeup, my problem seems to be to rid my mind of the fear that has unconsciously, but as I see it now, completely controlled my thought and made the days when necessity urged me out of doors or my desire led me to some public function, occasions to be dreaded

beforehand and looked back upon with horror.

It is difficut for me to understand that these signs of illnesss are not illness at all, but caused by an induced impression —but I have high hopes that this view of the case is the final and correct one."

In the meantime she had complained of pain in the sacrum, and wished to make sure that there was nothing physical to cause it. She insisted that I examine her. I found no tenderness even on rotation of the hip, and only a slight scoliosis. There was no dilation of the colon, and the appendix vermiformus had been removed. The surmise that the pain was due to the postural dragging induced by the restricted manner in which she walked on account of her dread was confirmed by the fact that it disappeared when she adopted a freer manner of locomotion.

The next step in the treatment was to accompany her to a large square in the neighborhood, across which I made her go alone. Although her hands became cold and her face pale, the pulse frequently increased, and her throat became dry, she declared that she had performed the feat better than she had ever done. The following day she had to do so on several occasions alone.

When she came to see me again she declared: "I can't get over it. I feel so different, but I dread the return of the trouble. The day after you led me across the square was the best I had for years. I went to church and enjoyed the service and experienced no palpitation. For a moment a sudden fear appeared, but I stopped and reasoned concerning it and concluded that nothing could happen." I concluded with the final adjuration that all now depended upon herself and she realized that she was well.

Commentary

Thus, violent, persistent, long-continued agoraphobia and claustrophobia were traced to a single incident upon which they were dependent. They were removed in less than a week by efforts directed towards giving the patient an understanding of their mechanism, indeed, compelling her to grasp it and then compelling her to take an exercise which afforded a practical demonstration.

Medical Suggestion As Cause of Disease.

Some manifestations of hysteria arise from suggestions of medical origin; and in many instances morbid fears are maintained by the attitude of medical men of whom advice is sought.

This is particularly true when the heart, stomach and the generative organs are concerned. The danger is greatest when examinations or treatment of a case is accompained by much chemical analysis, many chemical explorations by imposing apparatus of much surgical manipulation.

The neurologist who sees these cases after mismangements of these kinds has to studiously avoid any procedures which may seem to the patient to maintain attention upon the organ concerning the function of which the phobias exist.

Thus in a case seen this Spring where fear of loss of sight had accompanied aptosis of psychogenetic mechanism it was necessary to sedulously avoid even examining the patient after the first diagnosis had been made. Even visits were studiously neglected as one of the means of persuasion that there was not any condition demanding surgical or medical procedure. The taking of this precaution enabled a cure to be obtained

in a few weeks in this case, which might be labeled either palpabral tic or hysterical ptosis. The condition had been greatly aggravated by the frequent repetition of examinations, ophthalmological psychiatrical, medical, neurological, otological, serotogical, endocrinological and so on.

None of these had sufficed to ascertain the genesis of the tic, which was readily done by an intelligent anamneses in conjunction with a study of the actual character of the ptosis. The falling of the lids occured irrespective of fatigue, in the absence of conjunctival irritation, without the least sign of facial paralysis nor other organic nervous disease. Although the closing of the lids was usually imperative, yet they could sometimes be opened spontaneously by different devices.

This is characteristic of every tic. However, the more the patient wishes to open the eyes, the more tightly and longer they closed.

At first it was only by methods of distraction that they could be opened to me. These, of course, were used merelyl for diagnostic purposes, for therapeutically they are inefficatious. The patient had already discovered this after the eventual failure of such methods as clacking the tongue, coughing, whistling, etc.

The genesis was interpreted as follows:

The conjunctiva had become irritated by considerable driving along dusty roads in an automobile in the glare of the summer sun, the conjunction with the short sleep and the conviviality entailed by late hours.

The protection of the eyeballs by lowering the lid was the consequence. In the manner of the tics, this psychological response eventually became a psychological habit. This habit the patient might have shaken off as he had done previously with other tics; but in consequence of repeated medical opinions expressed before him during six weeks by distinguished men in a famous hospital nearby, there was added to the habit the phobia of the inability to open the eyes and the fear of loss of sight, and, with it, earning capacity.

Numerous other examples might be cited concerning implications of every organ of the body where the disorder was purely psychological. Suffice it to say that all are removed thoroughly and permanently, usually within a week or two by a sound psychotherapy based upon accurate diagnosis of the mechanism.

Correct diagnosis, however, always remains a paramount issue for a very great many psychological disturbances result purely from physical causes modifying cerebral activity. This is not only true of gross infections and intoxications. Mild disturbances of chemical balance in the organism more especially those enduced by aberrant internal secretions are a fruitful source of psychological symptoms. The same is true of dynamic disturbances of a low order such as chronic pain or even a neural irritation which stops short of pain. Psychological factors, however, are very often added and causes like the preceding and will have to be dealt with separately. I cannot, however, emphasize too strongly the importance of clear neurotopical survey of the patient before any treatment is attempted.

Announcements and Communications

ANNOUNCEMENT OF PROPOSED SHORT COURSE IN CLINICAL LABORATORY DIAGNOSIS FOR PHYSICIANS.

The Department of Pathology and Bacteriology has received frequent requests from physicians of the State for a short practical course in clinical laboratory work which will aid them in the diagnosis of communicable diseases and benign and malignant tumors. Such a course is now given by a number of schools to offer physicians an opportunity to get acquainted with the present laboratory methods in diagnosis of disease. It is proposed to give a three-weeks couse covering the diagnosis of diphtheria, tuberculosis, typhoid, gonorrhoea, syphilis, rabies and other communicable diseases. The course will also include the bacteriologic examination of blood, urine, feces, spinal fluid, stomach contents, water and milk, and the microscopic diagnosis of the more important benign and malignant tumors.

There will be laboratory work, lectures, and demonstration each day. The Schick test, tuberculin test, Widal test, etc., will be demonstrated and their value in diagnosis and treatment discussed. Fee to cover expense of course.

It is urged that all physicians interested in such a course to be given beginning June 21st, communicate at once with Dr. Aaron Arkin, Professor of Pathology and Bacteriology, West Virginia University, Morgantown, in order that arrangements may be made if the course is to be given. The laboratory of Pathology and Bacteriology is very well equipped for such work.

BOOK NOTICE

Cerebraspinal Fluid in Health and Disease
By Abraham Levison, B. S., M. D.
Associale in Pediartrics, Northwestern University Medical School, Associate Pediatrician, Sara Morris Childrens Hospital, of the Michael Reese Hospital Chicago; attending Pediatrician Mount Sinia, Hospital, Chicago; Attending Physician Childrens Department Chicago-Winfield Tuberculosis Sanatarium, with a foreward by Ludwig Hektoeu, M. D.

Fifty Illustrations including five color plates. St. Louis, C. V. Mosby Company 1919. Price $3.00.

The subjects considered in this valuable brochure are after first giving a concise history of cerebrospinal Fluid; The Anatomy and physiology of Cerebrospinal Fluid. Method of obtaining body. Properties of normal cerebrospinal fluid, Pathological cerebrospinal fluid.

Operative Treatment of Varicocele.—Jacob has had no recurrence in the 237 cases of varicocele in which he resected from 6 to 8 or 15 cm. of the anterior spermatic veins, close to the inguinal canal. The peripheral stumps were then tied together and drawn up by the ends of the ligature into the superficial inguinal ring where they fastened to the pillars of the ring.

Digestive Disorders of Artificially Fed Infants.—That every baby is a law unto himself in capacity, digestive power and assimilative process is a point emphasized by Harrison. Psychic and material individuality are as characteristic of infancy as of adult life. General guiding principles are essential, but no rigid hard and fast rules can be laid down to fit every case, for the baby is a living entity and not a machine with standardized parts. One must study, examine and handle each baby personally if success is to be attained.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., March, 1920

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 21, 1918.

Subscription - - - - - - - $2.00 per year
Single Copies - - - - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—H. R. Johnson, Fairmont.

FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

SECOND VICE-PRESIDENT—W. E. Vest, Huntington.

THIRD VICE-PRESIDENT—Joseph L. Miller, Thomas.

SECRETARY—J. Howard Anderson, Marytown.

TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

THE NEXT MEETING

According to a news item in the Journal of the American Medical Association the date of this meeting is May 18th, 19th and 20th. No official notice of the date has as yet been received by us.

I am requested by President Johnson to insist again upon the members who will present papers, to at once communicate with him, sending the title, etc. Surely it will be appreciated by all of us as to just how important this matter is.

Again let us be reminded to *Pay Our Dues* at once. Then Mr. Local Secretary, please get your list of paid up members to Dr. Anderson very promptly. Remember, too, that we want every eligible physician to be in good standing this year. To get the profession thoroughly organized each must do his part in securing the applications for membership of all the physicians of his section.

Let us all get to work and see to it that this Parkersburg meeting shall be the very best meeting our association has ever had.

THE PROPOSED COURSE IN CLINICAL LABORATORY DIAGNOSIS

Under the heading of Announcements and Communications is a letter from Dr. Aaron Arkin, which every man in our profession should read.

This is certainly a step of great importance to the physicians in West Virginia. We who have been in position to know of the work which is done in the Medical Department of the University of West Virginia feel quite proud of it. We can only regret that conditions are such that the entire course cannot at present be given there.

The courses which we do have, though, are very thoroughly given, and knowing Dr. Arkin as we do and his grasp of the subjects given under his direction, this is certainly a golden opportunity to take a short course in Laboratory Diagnosis which will be of untold practical value to the men doing general work.

THE APPRECIATION OF PHYSICIANS.

Sometimes we feel that ours is a very thankless profession. This is especially true when we have been making a hard fight to save some exceptionally dear patient from going out on the Lonely Trail.

Just now we have been going through another period when all of us have had to labor day and night. Many, many death certificates have had to be signed. We do get blue, we doctors. We feel like quitting at times. Is it to be wondered at? All of us know this feeling and know that our professional brothers have it. Yet have you ever noticed how we avoid talking of it among ourselves at our meetings.

Occasionally we come upon something in a lay paper which does show that our work does not all fall unheeded.

This clipping is reprinted from The Outlook:

THE DOCTOR

Of all lives the life of the physician is the most self-denying. He has no time that he can call his own. His home is his office, and furnishes him no sweet retreat from irksome care. The night can never assure him unbroken rest. Sundays are often, whether he will or no, his busiest days. He has no holidays, and few and fragmentary vacations. Friendship furnishes him fewer solaces than to other men, for his friends are generally also his patients. He meets men in their morbid conditions—when they are sick and miserable; when they are well he knows them not. He can hardly make a friendly call without the hazard of having it converted, before the evening is over, into a professional one. He fights a battle in which, no matter how many victories he wins, he is sure to be defeated at last—for he is fighting death. And when the defeat, which must come sooner or later, does come, he is fortunate if unreasonable friends do not charge the defeat upon his lack of science or of care. But no man renders a more grateful service; no man comes nearer to our hearts; no man is more beloved. Other services may be as great, but none is more deeply or tenderly appreciated. He summons back from death the child, and puts him in his mother's arms; the wife, and reunites her to her husband. No fee can ever compensate for such a service. He to whom it is rendered is forever debtor to the doctor.

Come to Parkersburg in May

State News

Dr. H. L. Crary, formerly located in Huntington, but now practicing at Athalia, Ohio, was a recent visitor in the former city.

Plans for a school of instruction for country and municipal health officers of West Virginia were made recently, at a meeting of the public health council in Charleston. The school of instruction will be held in Huntington, at the Hotel Frederick, on April 13 and 14. All county and municipal health officers and all public health nurses of the state are expected to attend.

There are to be a number of eminent speakers, including Dr. Welch, of Baltimore, head of John Hopkins Medical college, and Dr. Freidlander, of Cincinnati. There will be other eminent medical men from Washington and Baltimore.

Dr. V. T. Churchman, president of the state health council, will preside and deliver the opening address.

Dr. J. L. Pyle, of Chester, and Dr. E. H. Thompson, of Bluefield, were in Huntington en route from Charleston, where they attended the health council meeting.

Dr. H. G. Steele, of Bluefield has recently opened a new hospital in that city, known as the Mountain View Hospital.

Dr. A. P. Butt of Elkins, spent sometime recently in the eastern hospitals attending clinics.

Dr. Virgil E. Stiff, until recently of Switchback, W. Va., is now located at Robson, Fayette County, W. Va.

Ground Hog day found the village of Iager razed to the ground by fire. In its conflagration, Dr. Sampy D. Hatfield lost his home, office building and a boarding house.

Dr. L. V. Guthrie accompanied by his wife has gone to Florida for his annual vacation.

Dr. J. E. R.Ellis of Grafton died in December from heart disease.

Dr. Isaac Smith of Peel Tree, died January 15, 1920.

Dr. A. S. Bosworth formerly located at Jenningston, is now at Vindex, Maryland.

Dr. W. E. Vest, of Huntington attended the meeting of the American Congress on Internal Medicine.

Born, February 23, to Dr. and Mrs. Van Pelt of Oak Hill, a daughter.

Dr. J. E. Cannaday of Charleston, read a paper on "Fractures" before the Cabell County Medical Society in February.

The next session of the A. M. A., will be held in New Orleans, April 27-30, inclusive.

Dr. Ira J. Haynes, P. O. Box 24, Richmond, Va., who is arranging parties to go by boat to New Orleans, reports that already he has received a number of inquiries indicating interest in the proposed excursion, and wishes to learn as promptly as possible how many desire to join these parties in order that definite arrangements may be completed. Tentatively he estimates that the time necessary for the round trip by boat will be about, but not over, two weeks, that the cost of the trip will be practically equivalent to railroad fare and the cost of sleeping car accommodations and meals. If the demand warrants, one party will sail from New York another from some point on Chesapeake Bay. The lat-

ter will stop at Old Point Comfort and Havana. The plans are that these boats shall arrive at New Orleans on Tuesday afternoon in time for the General Meeting, the opening meeting of the Scientific Assembly, and the passengers will occupy their state rooms during the time of the annual session. While in New Orleans, breakfast may be obtained on the boat.

Jr. of A. M. A.

Dr. C. R. Enslow and wife of Huntington are spending some time at St. Petersburg, Florida.

By a vote of 7 to 2, the Board of Visitors of the University of Virginia, at a meeting January 12, passed a resolution which admits mature and qualified women to the graduate and professional schools of the University of Virginia. The rule will become operative at the opening of the new term next September.

President Wilson, on January 27, sent to Congress the nomination of Dr. Hugh S. Cumming as surgeon-general of the U. S. Public Health Service, to succeed Dr. Rupert Blue, whose term of office shortly expires by limitation. This is a richly deserved honor and one of which Virginians are justly proud as Dr. Cumming has admirably filled all the duties to which he has been assigned.

Dr. Cumming was born in Hampton, Va., a little more than fifty years ago and was graduated in medicine from the University of Virginia in 1893 and from the University College of Medicine, Richmond, in 1894. After this he served as interne at St. Luke's Hospital, Richmond, until he entered the marine hospital service, in New York. He was stationed for a short time in San Francisco from which place he was sent to Yokahoma, Japan, where he remained for four years. Returning to the United States, he was quarantine officer at Hampton Roads for four years and then went to Washington to work in the bacteriological department of the service. His present appointment is truly an award of merit.

Va. Medical Monthly.

Dr. George W. Crile of the surgical staff of the school of medicine, Western Reserve University, Cleveland, Ohio, has given $100.000 to endow a chair of surgery in that school.

The wife of Dr. M. L. Dillon of Charleston died on February 10th from acute broncho-pneumonia incurred during the recent epidemic of influenza.

Dr. H. H. Young of Charleston has returned from a visit to Cincinnati.

For the past several weeks the members of the Kanawha Medical Society have adopted the custom of having a weekly luncheon at one of the hotels of the city. This has proved to be an hour of considerable interest, various individuals having short after-dinner discussions on subjects of public interest from time to time. The object of this weekly assemblage is to promote acquaintance and good feeling among the physicians. In other words, to get them together.

Dr. C. T. Taylor of Huntington is spending several weeks in Florida.

ADVERTISERS NEWS NOTES

Dr. Katherine L. Storm, of Philadelphia, is announcing the removal of her offices from 1541 to 1701 Diamond street Philadelphia. The new building which Dr. Storm has purchased, has treble the

capacity of her present building, and is being equipped with every facility for quick and exact work. Dr. Storm is justly proud of the ever widening demand for the Storm Binder and Abdominal Supporter, and is planning to maintain her reputation for immediate response to each order.

CELEBRATES THIRTIETH ANNIVERSARY.

The Thirtieth Anniversary of the founding of the Abbott Labaratories, is being celebrated this month. This firm has recently established the precedent in the pharmaceutical of placing their employes on a profit sharing basis.

It is a notable fact and one worthy of commendation that more new medicinal chemicals, and council-passed products have come from the house of Abbott during the past five years than from any other firm in this country.

Armour and Company will be pleased to send a reprint of Frederick Fenger's article "On the Seasonal Variation of the Iodin Content in the Iodin Gland," to any physician who will ask for it. This paper records work covering more than twelve months, which work was done in the Research Labaratory in Organotherapeutics of Armour and Company. Address Armour and Company, Chicago.

Armour Labaratory has in operation what is said to be the greatest sterilizing apparatus in the world for the exclusive use of medical and surgical products. Any desired temperature may be obtained in the automatically regulated chambers.

Self recording thermometers keep records of the temperature during the process of sterilization. There is no guess work as to the accuracy of the individual in charge of the sterilization plant. The charts of the recording thermometers tell the story. These excellent facilities make it possible to sterilize thousands of gross of ligatures at the same time and thus obtain a product of perfect uniformity and absolute sterility.

Armour and Company are equipped to supply ligatures in large quantities and have gone to great expense to insure perfection of the product sold under the Armour label.

COUNTY SOCIETY REPORTS

The regular bi-monthly meeting of The Cabell County Medical Society was held at the Hotel Frederick, Dr. C. M. Buckner, the president, presiding.

The minutes were read by the Secretary and approved as they stood.

Dr. O. T. Hines presented a paper on "Pellagra," which was discussed by Dr. A. W. Adkins.

Dr. T. W. Moore then presented an interesting paper on "Observations on the presence of Foreign bodies in the Air Passages and Oesophagus," which was discussed by Dr. C. M. Hawes.

The application of Dr. John A. Keesee was presented, which was accepted, and referred to the Board of Censors.

Dr. J. Ross Hunter moved that the program which has been made out to June 10 be published, which motion was carried.

Dr. T. W. Moore very kindly offered the Journal of the A. M. A., for several years past, to the Society, to be bound and placed in the library. The offer was accepted, and a vote of thanks given Dr. Moore.

There being no further business, the

Society adjourned until February 26.

F. C. HODGES,
Secretary.

B. R. T. SOCIETY

Dartmoor, W. Va., Jan., 26, 1920.

Editor West Virginia Medical Journal.

Dear Doctor:

In fulfillment of my promise, I herewith send you a report of the meeting of the B. R. T. Medical Society, which met in Elkins, on January 15.

The following members being present: Drs. Butt, Dunham, Gray, McElrath, Moore, W. W. Golden, Wilson, McIntosh, Irons, Talbott, Bosworth, A. S. and Perry.

In the unavoidable absence of the President-elect, L. J. Lanich, Dr. Golden presided.

The minutes of the previous meeting were read and approved. Through failure of the committee on Necrology to have the report on hand the report was postponed till the next meeting.

The treasurer's report was presented, audited by special committee and approved. Balance on hand at the close of the year $87.60.

In the absence of the president, his inaugural address was passed and Dr. S. G. Moore made a report on 414 obstetrical cases. Dr. Moore gave a very interesting report of his experiences, and stated that he had never had a case of eclampsia in his own cases, though he had seen some in consultation. He advocates the use of anaesthetics in the latter stages of labor, and thinks that to not mitigate the agonies of the patient is a cruelty. Dr. Moore has had good results from the use of pituritin, and thinks when properly used, it is a valuable agent in the hands of obstetricians. He also stongly advises strict attention to cleanliness of both physician and patients, as well as attendants, and the immediate repairs to the perineum.

The paper was discussed by Drs. Butt, Irons, Talbott, Bosworth, Perry and Golden, Dr. Moore closing the discussion. Dr. Golden reported a case of dislocated semilunar having the bony articulations of the forearm, and X-ray photograph of the condition of the hand, both before and after the reduction of the dislocation. This is rather an infrequent dislocation and may in the hand of a careless diagnostician be taken for a Colle's fracture, from which it must be differentiated as well as dislocation of wrist. In fractures, the X-ray is becoming more and more essential to the definite diagnosis, and a perfect knowledge as to the result of treatment, before the possible improper reduction may become almost irremediable.

This case and the perfect result was very interesting. Dr. A. S. Bosworth presented a resolution relative to the selection of health officers, claiming that now the practice is to be selected more by "political pull," than by reason of fitness.

The resolution was partially discussed when, owing to the few members present and the importance of the matter, the resolution was tabled till next meeting. The meeting then adjourned to meet in Elkins in April—date to be announced.

J. C. IRONS, Sec.

NOTICE

We were shocked to learn that while we were meeting in Elkins, one of our oldest members and one of the most successful practitioners was suddenly called from earthly duties.

Dr. Isaac Smith of Peel Tree, Barbour county, died at the home of Porter Maxwell, on Thursday, January 15th, 1920, of heart disease, living only four hours after he was taken ill.

His death, caused general sorrow among a large circle of friends, for he

was greatly admired for both his ability as a physician and his geniality as a man.

He has long practiced quite successfully in the vicinity of Peel Tree and looked to be in good health, but few knew he was suffering from organic heart trouble. He was 67 years old and leaves a wife and two daughters to mourn his loss.

He was buried in the Masonic Cemetery at Clarksburg, on Saturday, January 17. Requiescat in Pace.

MERCER COUNTY SOCIETY

Mercer Medical Society met January 22 in the Chamber of Commerce at Bluefield, W. Va., at 8 p. m. Vice president Dr. W. H. St. Clair presided. The minntes of the last meeting were read and adopted. Under clinical cases. Drs. Martin and Vermillion reported very interesting cases of Small Pox and the symptoms relating to the diagnosis. Dr. R. O. Rogers reported a case of Adison's disease which was very interesting and freely discussed.

Dr. Slusher who was to have given the demonstrative lecture with lantern slides of scenery in the war, was deprived of doing so by not having the slides on hand. He hopes to give them at a later meeting.

The health committee gave the report which was accepted. Then came the election of officers for the ensuing year: President, C. T. St. Clair; first vice-president, B. S. Clements; second vice-president, F. T. Ridley; third vice-president, W. W. Harlow; secretary, E. H. Thompson; treasurer, T. E. Perry; censor for three years, O. S. Hare. delegate to the State Association; C. C. Peters, H. G. Steele, and W. H. St. Clair. The society then adjourned to the private dining room of the Matz Hotel where they were served with a delicious banquet. Visiting members present were Drs. Hicks an Killy of McDowell, Pierce and Pyott of Tazwell.

The discussion relative to the co-operation of the three societies was discussed; as a result of a committee was appointed from each society to arrange for our annual meetings. President appointed for Mercer, Drs. T. E. Vass and R. O. Rogers and instructed secretary to notify the secretary of Tazwell and McDowell counties. There being no further business a motion was made to adjourn to meet in Princeton, February 19.

RALEIGH COUNTY REPORTS

January 27th, 1919.

Editor West Virginia Medical Journal.

Dear Doctor:

At the regular meeting of the Raleigh County Medical Society, Beckley, W. Va., January 9, 1920, the following officers were elected for the ensuing year.

President—Dr. K. M. Jarrell, Beckley, W. Va.

Vice-Presidents—Dr. Ira M. Fisher, Stotesbury, W. Va.; Dr. M. C. Banks, Raleigh, W. Va.; Dr. W. C. Mays, Beckley, W. Va.

Secretary and Treasurer—Dr. Fred Stansbury, Beckley, W. Va.

Censors—Dr. J. E. Coleman, Beckley, W. Va.; Dr. J. A. Campbell, Beckley, W. Va.;Dr. U. G. Cook, Beckley, W. Va.

Delegates to the State Convention—Dr. T. F. Garrett, Sprague, W. Va.; Alternate—Dr. Robt. Wriston, Beckley, W. Va.; Delegate—Dr. A. U. Teiche Winding Gulf, W. Va.; Alternate—Dr. D. B. Jarrell, Beckley, W. Va.

MEDICINES

JOURNAL OF LABORATORY AND CLINICAL MEDICINE, DECEMBER, 1919.

Dr. P. G. Wooley, in an article entitled "Food Poisoning," gives an interesting review of some literature. Some investigators made a study of a series of poisonings due to canned asparagus, which was

spoiled and had a bad odor. Of the five persons partaking thereof, four died. From the material B. Botulinus was isolated. The organism resisted heating at 100 degrees centigrade for one hour, and autoclaving at ten pounds pressure for fifteen minutes. The toxin was destroyed by heating for ten minutes at 73 degrees centigrade. The organisms can live and multiply at 12 degrees centigrade in foods.

B. Botulinus is a spore-bearing, heat resisting anerobe which produces a powerful toxin. It is not a very common food contaminator.

All these facts serve to emphasize the warning to avoid spoiled food of any sort, but particularly spoiled canned food. Most canned food is perfectly safe. Any can that is "swelled" should be discarded and destroyed, and canned food, especially canned fish, should be used immediately after it is opened, and not allowed to remain many hours before it is eaten.

BOOK REVIEWS
ABSTRACTS.

Archives of Internal Medicine, December, 1919.

Antipyretic, II, Acetylsalecylic Acid and Heat Regulation in Normal Individuals.

Barbour, H. G. and Devins, M. M.

These authors, after considerable experimentation, conclude that normal individuals usually respond to acetylsalicylic acid (1 gm., per os.) by an increase in the carbon dioxid output and heat production. The maximum effect is reached during the fourth half hour after administration.

The average heat production of five subjects was 40.3 calories per square meter per hour after taking the drug, as against the basal average, for these persons, of 37.8 calories, an increase of 6.1 per cent, was thus indicated.

In spite of the increased metabolism, heat dissipation was not significantly altered. During the control experiments the average change in body temperature was—0.08 C.; after the drug it was plus 0.03 C.

The respiratory quotient does not appear to be altered by the drug in normal individuals. The same is true of the pulse rate.

Sleep does not appear to favor the exhibition of antipyretic action by acetylsalicylic acid.

These same authors in another article entitled, "Acetylsalicylic Acid and Heat Regulation in Fever Cases," have found that acetylsacylic acid, in 1 gm, doses, which have no such action in normal persons exhibits a marked antipyretic effect in febriles, temporarily aferbrile, and convalescent subjects.

In one and one-half hours the temperature change averaged—0.81 C.; in six experiments on four individuals, as against an average rise of 0.18 C., on four control days.

In the control experiments the heat elimination average 37.7 calories per square meter per hour. Under acetylsalicylic acid it became 52.1 calories, an increase of 38.2 per cent. The antipyretic effect is due essentially to this change which is associated with marked perspiration and subjective warmth.

The fall in temperature was accompanied by a heat production of 38.8 calories per square meter per hour, a decrease of 3.5 per cent below the 40.2 calories of the control days this change is probably merely the result of the cooling of the body.

The drug caused an average decrease in pulse rate of ten beats per minute. Temperary cardiac disturbances were noted in two cases.

The return to the initial temperature

level is brought about essentially by a reduction of the heat elimination to about one-half the normal figure and is unaccompanied by shivering or marked increase of carbon-dioxid output.

Sensitivity of febile, temporarily aferbrile, and convalescent subjects to antipyretic is not yet explained.

Basal Metabolism in Exophthalmic Goiter, J. H. Means and J. C. Aub.

Using the basal metabolism as an index to toxicity in exophthalmic goiter, the conclusion of these authors is that in the majority of cases, the results after two or three years are equally good with roentgen ray treatment as with surgery. after surgery the metabolism, shows a rapid preliminary fall, a secondary rise, followed by a final fall, that with roentgen-ray treatment there is a gradual progressive fall. That in securing the same end results with surgery or the X-ray, lesser rest factor is necessary with the X-ray. With the latter, there is practically no mortality. With surgery there is a definite one. That patients treated surgically do better, and the risk of operation is less, if they have previously had their thyroid and thymus glands irradiated.

That the risk of operation is greater and the need for pre-operative roentgen ray treatment is greater in cases with a very high metabolism and moderate tachycardia than in those with an extreme tachycardia and moderate metabolism elevation. That the safest program for treatment of exophthalmic goiter, as a whole, is the routine irradiation of thyroid and thymus glands, in all cases with surgery held in reserve for patients who do not then do well.

That surgery is contradicted in patients whose metabolism is rising in spite of the rest in bed.

Finally, that in the management of exopthalmic goiter, periodic determination of the basal metabolism should be quite as much a routine as is the determination of sugar in urine in diabetes. Further, that in borderline cases, the basal metabolism furnishes very valuable aid in differential diagnosis.—F. C. H.

ANNALES del'INSTITUT PASTEUR, PARIS, NOVEMBER 1919
Volume XXXIII, No. 11.

Levaditi and Marie have undertaken extensive investigations upon the treponema of general paralysis: and from their work on treponema derived from the brain of general paralytics, and from chancres, have reached important conclusions. They describe two forms of spirochetes: (a) The neurotrope. or virus which affects primarily the nervous system, and (b) The dermotrope, or virus which has a predisposition for the skin.

There are both biologic and anatomopathologic differences between these two forms as follows:

1. *Period of Incubation.* ..The period of incubation which precedes the appearance of the lesions provoked by the neurotrope virus is particularly long. It varies from more than four months to five or six weeks as a minimum. (The latter after several successive passages through rabbits.)

On the contrary, the incubation period when employing the dermotrope virus is much shorter, from six weeks as a maximum to 15 days as a minimum.

2. *Aspect of the lesions* in the rabbit.

Neurotrope

Macroscopically

1 Papulo squamous erosion.

Microscopically

2 Epidermis, light erosion,desquamation and vulceration.

3 Dermis, vascular lesions not endarteritis but periarteritis.

4 Infiltration, not marked.

5 New-formed connective tissue. None.
6 Distribution of treponema layer of malpighi.

Dermotrope.

Macroscopically.

1 Induceated chancer.

Microscopically.

2 Deep ulceration.
3 Endoarteritis and periarteritis.
4 Intense.
5 Large amount.
6 Deep layers of dermis.

3. *Evolution.* ...The neurotrope virus is distinguished from the treponeme of usual syphilis by the fact that the lesions which it produces in the rabbit heal only with an extreme slowness, usually over 100 days.

. *Virulence.*—The dermotrope virus, after successive passages through rabbits for periods of at least six years, retains its power to produce the usual syphilis in man, as was shown in a case of accidental infection. This produces the typical chancer in monkeys, and a local papulo squamous eruption, with spirochetes present in man; not accompanied by general manifestations, but followed by a postitive Wassermann, although late. The neurotrope, or virus of general paralysis, even after a single passage through th rabbit, is shown to be entirely inocuous for man, producing neither local, general, nor serologic evidence of infection.

F. C. H.

SURGERY

ADEQUATE REDUCTION AND CARE IN COLLES'S FRACTURE

Frederic J. Cotton (*Boston Medical and Surgical Journal,* December 4, 1919) has observed many unsatisfactory results in Colles's fracture and found in nearly every one the trouble has been the failure to recognize and handle the backward rocking of the distal fragment, which, as long as it persists, makes proper reduction of the ulna impossible. In this fracture the damage may be expressed as a rotation backward of the hand about the ulnar head as a fixed point which tears the ulnar ligaments loose and also breaks the radius. The hand is displaced, with the radial fragment, up and back into a varying degree, but always with the hand displaced backward and the associated tilting backward of the lower radial fragment. Cotton's method of reduction is to reverse, in reducing, the mechanism of the production of the deformity. In other words, if the ulna is the fixed point about which the hand is displaced, to make it the fixed point about which one reduces; if the hand is displaced in extension, to reduce it in flexion; if it is displaced in a rotation of supination about the ulnar head, to reduce in pronation. The older methods of reduction aimed almost exclusively at a carrying forward of the lower fragment on the upper; the new matter is, after the obvious displacement of the radius is corrected, then to carry the hand about the ulnar head as a fixed point into pronation and flexion. A good deal of force is directed up under the ulnar head, a strong force flexes the hand, and a twist of the whole hand about the ulnar finishes the work. For retention the average splints are often inefficient. Position is best held in flexion, and flexion is best held in plaster, preferably applied as stripsplints of eight to ten layers of plaster of Paris bandage, one on the back from elbow to finger knuckles, one in front from upper forearm to palm, these caught with a few turns of plaster bandage. Watch carefully against interference with the circulation, if necessary slitting the plaster along the side after a day of two. The flexed position is abandoned after a fortnight, and straight splints are then worn for a week.

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 10 HUNTINGTON, W. VA., APRIL, 1920 Subscription $2.00 per Year
Single Copies 20 Cents

TUMORS OF THE BREAST FROM THE STANDPOINT OF THE SURGEON WITH LIMITED EQUIPMENT

By. Dr. James Schwinn
Wheeling, W. Va.

Read at Annual Meeting of W. Va. Med. Ass'n., Clarksburg, May 1919

In a study of 406 cases of breast tumors at the Mayo clinics it became evident, that in 62% of benign tumors there was a wrong clinical diagnosis, and in 30% of malignant affections the diagnosis was also wrong.

These cases having been sent from all sections of the States, we must conclude, that the above percentage of errors in diagnosis must be the average throughout the States, and it is therefore high time to ask, why there should be such an appalling percentage of mistakes concerning an organ so easily accessible to the eye as well to the palpating finger. It shall be the aim of this paper to point out some of the causes leading up to this deplorable state of affairs, and to pave the way to a better understanding of the various breast lesions, especially for the man who is not fortunately situated, as to command the services of a well equipped pathological laboratory, presided over by an expert pathologist.

The difficulties of the surgeon with regard to mammary tumors are many.

First of all is to be noted, that even among pathologists there are great differences of opinion as to the nature of some of these tumors, and as to proper classification, so that every text book gives a different definition of what a tumor consists of, and a different classification, thereby creating discouraging confusion in the mind of the average physician and leaving him guessing as to what the author really means. Again, the microskopic diagnosis of tumors in general and that of mammary tumors in particular is often exceedingly difficult, especially when it comes to a decision of the most vital question, that of malignancy, and it happens quite frequently, that a section is pronounced benign by one expert, precancerous by another and outright malignant by a third one.

Add to these difficulties the further one, that just where the microskope

would be of the greatest help, i. e. in beginning malignancy, there is generally no change visible to the unaided eye to guide the microskopist in selecting the proper location for sectioning, all of which goes to show, that even in well equipped clinics the microskope is by no means infallible, and to the average surgeon it must needs be of little help. Other means of diagnosis must therefore be available, and to him who keeps his eyes open, fortunately they are.

To appreciate a pathologic condition, one must know the normal and physiologic. Let me ask here the question: how many of those present are in the habit of examining the female breast at every opportunity presenting itself? And yet here is the greatest opportunity to acquaint yourself with the normal physiologic conditions which vary so extensively during the periods of puberty, gravidity, lactation, menopause, and senility. Many a mammary gland has been sacrificed from lack of this knowledge so easily acquired, without inconveniencing either patient or physician, and still more, many a serious breast lesion might be detected in its early development, if this practice were adopted.

In this routine examination one is amazed at the wealth of changes in the breast as to its size, form, apparent tumefactions, surface markings, sensitiveness, etc., all of which, if not correctly interpreted, are apt to lead to an erroneous diagnosis, and consequent wrong treatment.

My first advice then is this: examine every breast at your office or at the bedside, no matter how young or old the patient, no matter how many you have examined already, no matter whether the patient deems this necessary or not. Do it under some pretext or other, without hurting her feelings.

Note carefully the size, form, configuration, consistency, the amount of fat, elevations, depressions, appearant tumefactions, tender spots, condition of nipple and possible secretions from nipple, such as colostrum, milk, blood, pus or other fluids. Compare the changes with those you have found in previous cases under similar circumstances as to age, physiologic activity, etc., and you will soon get a fair knowledge of the normal conditions, which will save you from many pitfalls in the diagnosis of pathological conditions.

Having thus gained a knowledge of the normal, we are now ready to proceed to the abnormal, to the pathologic, and here, let me ask another question: How many of those present are in the habit of making at least a careful microskopic examination of their specimens? And yet here is the greatest postgraduate course that any one could wish for. With the appearance before and during the operation and with the fresh specimen before you in its natural colour, consistency, surface markings, with its various appearances on sectioning in different directions you will form a mental picture of the whole situation which is not apt to fail you in your next similar case.

Proceeding along these lines you will soon be able to make a correct diagnosis if not before, then surely during an operation in the majority of your cases and so decide on the spur of the moment whether it is necessary to remove a part or a whole gland or whether the surrounding tissues must be sacrificed including overlying skin, underlying muscles, and regionary lymph glands, and all this without the aid of the microskope.

It is said of Billroth, that he hardly ever made a mistake in his diagnosis from the fresh specimen, and we know that such men as Oschner, Mayos, Blood-

good and a score of others are such adepts in this particular field that their microskopic diagnoses match the microskopic in at least 95%.

In the hospital with which I am connected there is an immense amount of surgical work done every year; bushels of interesting specimens are removed, and it is the exception instead of the rule, that the operator deems his specimen even worthy of a look, let alone a section.

The harvest of a busy forenoon generally wanders towards the incinerator instead of towards the laboratory although we have every facility for laboratory work and a competent pathologist at the head of the department.

What a great pity for the surgeon who deprives himself of the greatest and easiest means of learning and how unfair to the patient who is so often left in the dark as to what really ailed her. I have seen it more than once that a patient was told she had a cancer, and after removal of what proved to be a perfectly harmless tumefaction, even a physiological one, was left under the impression that she had gotten rid of a cancer. Imagine that patient's anxiety, the sword of Damokles hanging over her head for the rest of her days!

While it is our duty to enlighten the laity as to the dangers of cancer, it is no less our duty to relieve a patient's mind of cancer fear, where we have made certain that no such condition exists.

My second advice then is this: Examine every specimen removed at least macroskopically and carefully; make a note of its appearance, colours, consistency, etc., and follow it, where possible not to the incinerator but to the laboratory. Besides the eye and the finger we have another means of diagnosis, which is of the greatest importance and yet so little made use of. That is, the hypodermic syringe. It will tell you at a moment's notice, whether a certain nodular mass is a solid affair, or whether it is cystic and more than that, it will show in one case a murky watery fluid denoting a simple cyst, in another, a bloody fluid indicating danger, in a third one, a milky or oily fluid, denoting a milk cyst. It will do more, as certain cystic formations are often cured after aspiration.

My third advice then is this: Do not forget the aspirating needle. With the knowledge gained so far, we can now proceed to the consideration of the neoplasms proper. The burning question in any sort of tumor is that about its benign or malignant nature. Once you can assure your patient, that her ailment is not cancer, she does not care a rap as to what else you call it, therefore the clamor of the profession for early signs of cancer, which alas, are few and far between.

A cancer in its beginning is always a microskopic affair, and therefore inaccessable to the unaided eye or palpating finger. It begins at the moment the proliferating cells of the acinus break through their natural barrier, the membrana propria and begin their lawless infiltration of the surrounding lymphatic spaces, whence they enter the lymphatic vessels to be carried to the next set of lymph nodes, and our first suspicion of a cancerous process is aroused only at a period when this infiltrating process has gone so far as to produce a palpable tumor, and when therefore an early diagnosis is a pious wish, which hardly ever sees its fulfilment. Surgeons have long since recognized this fact, and widened their field of dissection, from the simple extirpation of the tumor to the ablation of the whole gland, adding later the excision of a large amount of skin, the removal of the axillary glands and fat, the

removal of the underlying fascia and muscles, followed by massive doses of X-Ray. The most important symptoms of malignancy, almost pathognomic, is the fixity of the tumor against the rest of the gland, and it should always be carefully searched for. It is the result of the infiltrating process described above, and elicited by grasping the tumor between the thumb and middle finger of the left hand while the corresponding finger of the right hand grasp the remainder of the gland, and move it in a lateral direction to and fro. The symptom, however, is conspicuous only in cases of scirrhous cancer, while it is indistinct or absent in the medullary cancer, and is occasionally found in the scar contractions after suppurative mastitis.

The next important sign of malignancy is the retraction of the nipple. It is due to contraction of the newly formed connective tissue between the tumor and the nipple, occurs in the scirrhous forms of cancer, when the tumor is situated close to the nipple. It is characteristic of cancer, when it is found, but its absence does not always indicate absence of malignancy.

The same is true of the higher position of the nipple on the affected side. Pain is such a variable quantity that it can aid but very little in the diagnosis. It is often absent for long periods and occurs in so many breast lesions, that its diagnostic value is but insignificant. Fixation to the skin and underlying muscles, infiltration of the axillary and other nodes, ulceration, metastases and cachexy are all late symptoms and should not be met with in a time, where physicians and the laity are constantly enlightened as to the dangers of cancer, yet, owing to the insidious beginning and course of many cases of malignant growths, the patient is often unaware of the fact, that there is anything wrong at all, and a little lump in the breast is wholly ignored.

Criminal negligence however must be laid at the door of the psysician, who is aware of the presence of a tumor and sits by, waiting for those symptoms of malignancy which, as a rule, seal the doom of his patient in spite of the most desperate efforts of the surgeon.

A wholly different clinical picture from the above is presented by the benign growths. Just as fixity is the symptom par-excellance of cancer, so is mobility the sinequa'non for a benign growth. A benign tumor is separated from the rest of the gland by a distinct fibrous capsule and between this capsule and the glandular tissue proper there is a certain amount of thin areolar tissue which permits the motility of the tumor. These benign growths are generally of slow development, affect women before the menopause, mostly painless, show no fixity to skin or underlying muscles, no nipple retraction, glandular enlargement or metastases. They are of medium size with few exceptions when they may reach enormous dimensions. They are almost always single and affect one breast only and are easily shelled out of their bed permitting the rest of the gland to be left behind. They are often cystic formations and contain all sorts of fluid material, such as cellular debris in simple cysts, milk or oily fluid in milk cyst, bloody or chocolate colored fluid in milk cysts, whose walls are chocolate colored fluid in cysts, whose walls are covered with papillary growths. Solid benign growths belong most invariably to a group of tumors composed of two kinds of tissue, epithelial and connectif, and are therefore called fibro-epithelial tumors and accordingly to the prevalence of one or the other components they are further divided into fibro-adenomas and adeno-

fibromas. On sections they are usually reddish-white, often glistening, hard, with here and there a small reddish, soft spot, indicating the location of the adenomatous part of the tumor. In between the inflamatory lesions and the benign tumors we have an affection which has been the subject of most extensive study during the past ten years, an affection which has been given a dozen different names, but is now generally described under the name of chronic cystic mastitis. It generally affects women mostly around the menopause, is usually, but not always one-sided, often more or less painful, especially about the menstrual period, and affects more or less the whole gland. On examining the breast it has a shot-like feeling from the presence of a few or numerous smaller or larger round, hard cysts, which, sometimes, become smaller under pressure. The gland, as a rule is affected more or less in its entirety, but is not much enlarged. There are none of the signs of malignancy present as a rule, but a certain percentage of these tumors are known to become cancerous.

Histologically, the affection is probably to be assigned to the class of hyperplasis on an inflammatory base. We see a dense overgrowth of the stroma proper with the resultant formation of numerous retention cysts, containing various kinds of fluids.

In view of the fact that many cases of chronic mastitis become cancerous later on, the rule at least for the general surgeon, should be the ablation of the whole breast.

Supposing then we are confronted with a tumefaction taking in part or all of the breast, what should be our procedure?

First—Make sure that you really have a pathological condition and not one of those numerous changes due to increased or diminished activity of the gland as during the various physiological periods of evolution and involution of the breast.

Second—Having excluded the above conditions, decide as to whether the tumefaction is of an inflammatory origin, such as acute or chronic pyogenic mastitis, a tubercular, actino-mycotic or syphilitic lesion. The rapidity of development, the previous history, the tuberculin test, the Wasserman, and the result of treatment will be of greatest importance here.

Third—Having excluded an inflammatory swelling, our diagnosis narrows down to the consideration of real neoplasium, and our next and by far the most important task is the differentiation between benign and malignant growths. If we find the tumor to be benign, then we have to consider practically only the cysts, the different forms of fibro-epithelial tumors, and the chronic cystic mastitis. All other benign tumors, such as pure fibroma, pure adenoma, myxoma, and lipoma, are of such rare occurrence that they may be left out of consideration. If the tumor be found to be malignant, then we have to differentiate between the different forms of carcinoma, i. e.: Scirrhus, medullary cancer, and Paget's cancer on the one hand, and the different forms of sarcoma on the other. Keeping in mind what has been said about the appearance and behaviour before, during and after operations, and taking in consideration the age of the patient, the history of the swelling, and other circumstances it should be possible to arrive at a correct diagnosis in a large majority of cases at least. Let us then aim to be real surgeons, and not mere carpenters, so as to be able to give our patients what they are entitled to—The Best.

LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

ACHONDROPLASIA

Effect on Menstruation—Report of Two Cases

DR. JOSEPH L. MILLER
Thomas, W. Va.

Read Before the Barbour-Randolph-Tucker Medical Society, July 15, 1919.

Achondroplasia, sometimes called "Foetal Rickets," "Micromelia," "Chrondro-malicia," etc., is a disease originating in the fetus in utero, characterized by defective development of the long bones.

It is said by some authors to be comparatively rare, but doubtless there are but few physicians of several years practice who have not seen one or more cases.

For nearly twenty years I have had under observation two cases that I wish to report, particularly in regard to the apparent effect upon menstruation. First, however, will give briefly a resume of the characteristic features of the disease.

Its etiology is unknown, and all authorities agree that syphilis is not a factor. Heredity seems to be an influential factor, but is not constant. Some think it is due to defective function of one or more of the glands of internal secretion, and my two cases would seem to bear out this theory.

Its pathological lesions are localized in the long bones and in the bones at the base of the skull. The growth of the long bones being checked by the impairment of the proliferating cartilage cells of the epiphyses, and premature closure of the epiphysis and diaphysis.

The achondroplastic dwarf presents a characteristic appearance. He is short of stature—usually four feet or less; large head; retraction of the base of the nose; normal length of trunk with its center above the umbilicus instead of below as in normal adults; more or less lordosis and abdomen protuberant; extremely short legs and arms with considerable bowing of the legs and frequently of the arm bones as well; hips heavy and broad; hands are square and thick and the fingers very short, thick and divergent into three separate groups—thumb, index and middle fingers, and ring and little fingers—this curious deformity giving rise to Marie's very descriptive term of "Trident hand." The vault of the cranium is usually large, not unlike that of hydrocephalus; eyes wide set due to the broad flat nose; hair soft and abundant; intellect normal and in some instances unusually acute.

The normal intelligence, abundant fine hair, good skin, and absence of the protruding tongue and drooling, differentiate the achondroplastic from the cretin. The pug nose, hard bones instead of soft, normal chest instead of beaded ribs and pigeon breast; and lack of enlargement of the epiphysis are the chief points of difference between foetal and post-natal rickets. The X-ray makes a differential diagnosis positive.

The half dozen or more recent authors to whose works I have access, all state that the genitalia and sexual instincts in the achrondroplastic are normal, but make no mention of any abnormality of the menstrual function. The fact that both my cases have been widely divergent from the normal in this respect is the reason for this paper.

The characteristics common to my cases are: both present the typical appearance of achrondroplasia; both have mothers slightly under the normal female stature, but perfectly normal in every other way; both are members of

large families, their brothers and sisters being normal; no history of other dwarfs in either family. No evidence of thyroid trouble in either patient or any member of their respective families.

CASE I.—B. M., single, age 26 years, height 4 feet 2 inches, weight 126 pounds, legs, hips, arms, hands, and face very typical of this disease. Intellect even better than some other members of her family, none of whom are imbeciles. At the age of two weeks she began menstruating and continued regularly at twenty-eight day intervals until the age of twenty-four years, when she went into the menopause with the characteristic nervous and physical phenomenon of this condition in the normal female. Pubic hair appeared at about five or six years of age and about the same time facial appearance became that of a mature adult. She has had no flow since last December but continues to have at times the backache and cramps common to some women immediately preceding a menstrual period. In April last she was operated for a chronic appendicitis of some years standing, at which time a fibroid appendix and a diseased right tube were removed.

This case apparently belongs to the second of the two types of cases into which precocious menstruation is grouped, namely, first those in which menstruation is the only symptom, second those in which it is accompanied by the anatomical changes of puberty and precocious maturity. Kerley says: "in this second group we are dealing with a profound disturbance of development probably due to some derangement of the ductless glands. It is a most unusual occurrence." In 1912 Lenz in a most exhaustive review was able to collect only 150 cases from the literature. In these cases menstruation usually began in the first two years, many of them at birth, and at eight or ten years they presented the full maturity of the adult. One case reported began to menstruate at two years, became pregnant at eight, went through the menopause at twenty-five and lived to the age of seventy-five years.

CASE II.—M. G., single, age 25 years, height 3 feet, 11 inches, weight 125 pounds, all features typically achondroplastic, with marked bowing of the femurs and bones of both legs. Intellect normal. Development of the breasts, and pubic and axillary hair appeared about the twelfth or fifteenth year, but no indication of the menstrual flow until the twenty-first year, though for several months preceding the flow there was a sort of general mallaise for a few days at four to six week intervals. Several months treatment with Thyroid extract did not seem to have any effect. Ballantyne of Edinburgh in the new English System of Gynecology by Eden and Lockyer thinks that absent or delayed puberty is due to "some severe general disorder, usually connected with the endocritic system."

It is probable that certain hormones arising from the endocritic system, which normally stimulate growth and development of the sexual functions, were present and over active in the first case reported above and surpassed or insufficient in the second one.

All authorities agree, however, that so far all treatments tried in cases of achondroplasia have failed to give any improvement in the conditions present.

PROSTATECTOMY

By T. K. OATES, M. D.
Martinsburg, W. Va.

Read at the West Virginia State Medical Association in Clarksburg.

The operation of choice for the removal of the hypertrophied prostate gland was formerly the perineal route by many surgeons. Recently the suprapubic operation is the operation of choice. Dr. Belfield, of this country, was the first man to do a radical operation in 1886 for the removal of the prostate to remove the obstruction to the urinary flow. The operation consisted of the removal of the promient portion of the gland, through the bladder suprapubically. McGill of Leeds, in 1888, was the first person to bring the suprapubic operation before the profession in Europe. Mr. Frayer, of Europe, was the first person to do a total enucleation of the prostate, December 1st, 1900.

The prostate gland is practically composed of twin organs until about the fourth month of foetal existance, after that they become aggultinated together. These two organs are lateral lobes, are separate and distinct as are the testicles, so far as the function and secretion is concerned, and have separate ducts, which open in the urethra on either side of the veru montanum. Each of these lobes is enveloped by a strong fibromuscular capsule, and this capsule extends over the whole organ, except the anterior and posterior comissure. The ejaculatory ducts do not enter this capsule, but pass forward into the interlobular tissue, and open into the urethra. The prostate gland is further encased by a sheath or capsule formed from the recto-vessical fascia and bands connecting the two. In the operation of prostatectomy it is the inner true capsule that is removed, and not the outer capsule or sheath. The outer sheath prevents the infiltration of urine into the cellular tissue of the pelvis.

The suprapubic operation, in my opinion, is the better operation of the two, and, therefore, I will describe my method of doing it: The operation should be classified according to the condition of the patient, as simple and complicated. The simple operation is the non-infected type, with good resistance. The complicated is the infected type, with cystitis, pyelitis, etc., with low resistance. The patient should be thoroughly examined, dieted, and bowels evacuated at least twelve to twenty-four hours before the operation. He should be shaved and painted with a 50 per cent tincture of iodine, twenty-four hours before operation. Irrigate bladder with boric or saline solution, and refill bladder and retain same after patient has been anaesthetized. Repaint field of operation with a 50 per cent tincture of iodine. Make an incision above pubes in median line about 1½ to 2 inches long, separating the recti muscles. Dissect off fat in the suprapubic space in the complicated cases, as it will sloughout if left alone. Use peritoneal clamps to pick up bladder on both sides of line of incision to be made, and draw well up, so as to protect the incision and avoid infection. Open bladder, and examine thoroughly for stones and growths. Pass fore-finger in rectum, and push gland well up, and then use first and second fingers of the other hand to peel out gland in the bladder. It is more convenient and easier to start peeling out the gland at the lateral side of the urethra and to terminate at the opposite side. This enables you to preserve a strip of mucous membrance of the prostatic urethra between the bladder

and the membranous urethra and prevents stricture formation. The enucleation should include the entire gland except the portion in front and behind the prostatic urethra. When the gland has been enucleated the capsule contracts quickly and stops hemorrage. The gland should be removed without a chance of infection if possible.

In simple case with good resistance the time of recovery can be minimized very much by using a soft rubber catheter, No. 8, passed through the urethra, up through the bladder, and out through the incision. Fasten the upper end of the catheter in the lower end of the incision with silk worm gut. Clip two or three openings in the portion of the catheter in the bladder, so as to enable you to irrigate the bladder. Close the bladder and fascia separately with 20-day cat gut, and close the skin with silk worm gut. Irrigate through the upper end of the catheter with normal saline two or three times a day for three to five days. At the end of the time specified, or if the meatus becomes irritated, remove the catheter, and allow the incision to close. If the patient is not able to void at this time, pass a soft rubber catheter or a return flow catheter, and irrigate the bladder gently so as to not force the water through the incision. Do this from two to four times a day until he voids. This should have your personal attention, and not allow orderlies or assistants until they are thoroughly trained in this work. I have had patients' incisions to heal by first intention, and leave the hospital in twelve days.

The complicated cases with low resistance should have a two-stage operation. Use the same precaution as was done in the simple cases, and do not allow the incision to become infected if possible to prevent it. After the incision has been made in the bladder insert two sterile rubber tubes about one-sixteenth to one-eighth of an inch in diameter and about twelve inches long, so as to drain into a bottle. Close the layers as was advised in the simple cases, and fasten the tubes in the same manner. Irrigate the bladder often, or, if necessary, constantly through one tube and let it flow out the other. This should be done until the cystitis and complications have been removed, which will usually take from one to two weeks. Reopen and remove the gland at the end of this period, and dissect out the sides of the incision if infected and close as advised in simple cases. But, if you think the incision is infected, so that you can not get primary union, then let it heal by granulation. It is necessary to keep up the irrigation until the patient can void regardless of your method. If you wait for the incision to heal by graunlation, it will take from four to ten weeks.

PELLAGRA

By O. T. HINES, M. D.
Huntington, W. Va.

Paper Read Before the Cabell County Medical Society.

My father who was a physician of the old school and therefore a good diagnostician, used to tell me that I was afflicted with an incurable malady. He said that I had a hypertrophied ego, an atrophied intellect; that I had a chronic dysentery of words and a constipation of ideas, and would eventually end up as a spieler for a side show, or a clown for the main circus; and I can hardly get away from the conviction that my paper tonight will not justify his assertion as to the clown, because of the fact, that I know I have undertaken a thing utterly beyond my capabilities; in getting up a paper on one

of the greatest medical enigmas of the age—Pellagra.

When I was in school, some twenty-five or six years ago, my good professors in their lectures, included Pellagra in a group of diseases of little importance to us, as they existed in foreign lands, and, while interesting and curious from a strictly scientific view-point, were alluded to only as being unimportant.

They gave us a short course (one year) in the diseases peculiar to this country only, and laid particular stress on bedside diagnosis and "saddle bag" treatment. Preventive medicine and laboratory diagnosis had to give way to Therapeutics and Materia Medica. Tropical diseases were left to those in the tropics and the older men, when such things as Bacteriology, Infection and immunity, were mentioned shook their heads, shrugged their shoulders, and would say. "Better get up on your bones, boy—get up on your bones."

From the descriptions I had read of Pellagra and the meagre amount I knew about it, I was inclined to look upon my first case as just another one of the vagaries of syphilis.

Closer attention to articles in the leading medical journals convinced me of its identity and perusal of some ancient medical books, also convinced me that it was not peculiar to Italy and that my library of useless information was a mine of knowledge.

Viewed from historical data, Pellagra is a modern disease.

John Mason Goode in 1823 wrote extensively of it and refers to Frappoli as being the first writer upon the subject.

Frappoli's paper in "Morbum Vulgo Pelagrum dictum" was published in Milan in 1771. Frappoli differentiated between it and Pillarella, as syphillis was called when depillatory.

The next writing of any note was that of G. M. *d* Ogleggio in 1784, Venice, who apparently thought it due entirely to the sun's rays as he dubs it, "A disease of Vernal Insolation."

The next paper and the best of all, up to the time of Goode, was that of Jansen of Leyden.

These men all ascribed its cause as being due to the sun's rays. Odoardo attributed it to a "scrofulous habit" or tuberculosis. Vidimari and Alibert to an "impetingious impurity" and called it Icthyosis Pellagra." Its name derived from Pelle-skin and Agra-burn, possibly field, would either mean burning skin or field skin.

Goode is his nosology puts it down as Elephantiasis Italica and states that it is produced by the debilitating causes of hot confined air, want of cleanliness, and bad diet, operating in many cases upon a diathesis hereditarilly tainted and that it rarely appears before puberty.

It usually begins in the early spring with a feeling of general languor, listlessness gloom, feebleness and stupor in the legs and hence unsteady gait as also due to marked vertigo and confusion of ideas. A little later on and usually the same year, but not always, the skin of the hands, forearms and forehead and sometimes the feet, begin to tingle and burn and small rosy macules and papules begin to appear and as these rosy areas coalesce the skin shows an even reddish blush, nearly always symmetrical and extending from fingers, usually to about one-third to one-half way up forearm and much resembles Erysipelas at this stage. It soon shows a brownish tinge and begins to desquomate and crack slightly and has a shining appearance. The tongue usually about this time begins to look

beefy and glistening and is nearly always deeply furrowed. A general stomatitis supervenes usually with a profuse flow of saliva and whitish patches on lips. Then burning, cramping pains in stomach and an aching in the rectum, with small scant passages at frequent intervals, succeeded by a profuse dysentry about completes the symptoms complex to the final stage when a train of nervous symptoms of such decided character begin to manifest themselves that this may truly be said to be the nervous stage although there are mild nervous symptoms from the beginning. A rather sharp exascerbation of either the cutaneous, or gastro intestinal symptoms or both is succeeded by an atoxis, staggery, drunken gait, incoherence of speech, aphasia and general muscular and mental inco-ordination. The debility is greater, the appetite gone or irregular, the sleep disturbed on account of acute pains in the head and spine, and is soon followed by an acute delirium.

The cutaneous symptoms now practically disappear, leaving a bluish "washerwoman" look to the skin while the nerves are greatly augmented. The vertigo increases, the patient is sad and loves solitude and melancholic delirium alternates with furious mania. The tedium of existence is unsupportable and suicide is a frequent consequence, most of them by drowning.

Coercion is absolutely necessary.

Nephritis and cardiac failure and an acute dropsy, or sometimes an enteritis, drops the curtain and closes the scene.

I cannot recall any disease with the possible exceptions of Flu and Cancer where there has been more doubt and argument as to its true and most probable cause.

Since its first appearance in Italy until today, it has been regarded by some as a deficiency disease due to an improper diet. Others hold that it is due wholly or in part to lime deficiency as it but rarely occurs in limestone countries.

An excess of silaceous matter is held by some to be causative. Vitamine deficiency by others. Imbalance of internal gland secretions by others. Hook worm by others and lastly and by far the greater number, subscribe it to the use of diseased Indian corn.

Whatever may be its cause or causes, I make no attempt to say, but I do know that a proper diet, pure water, personal cleanliness, plenty of fresh vegetables, no canned food, meat, eggs and milk with lime in drinking water, and frequent doses of oil of chenopodium and *no corn bread or cotton seed lard* will cure some cases and a reversal of this will cause it or aggravate any case.

Quassia and HCL have been of benefit in the cases I have treated, but the only agents which have been of any real value are sodium or mercury cacodylate and neosalvarsan pushed to tolerance.

As an after thought I would add that there is no regularity in the way that the symptoms occur but I have related an average case as I have observed it. Some cases are very light, so slight as to be hardly noted and that are not fully developed for several years—so called masked cases as well as fulminant ones occur, in the latter type all symptoms occur with great rapidity and violence and it runs a rapid and fatal course in a few weeks or months.

There is a distinctly Typhoidal type which is nearly always fatal.

In conclusion, I wish to state that I feel that Pellagra is quite a serious problem to America and one that is not off in the future but with us now.

What information I have had in regards to Pellagra is gleaned from var-

ious articles read at random and from various journals as well as the treatment of quite a number of cases, the reading of Goode, Wood, Pepper, Sajous, Gregory, Stelwagon, Goldberger and much talk with my good friend Dr. Vest.

PULMONARY TUBERCULOSIS

By CHAS. R. WOOLWINE, M. D.
Davy, W. Va.

Read Before the West Virginia Medical Association, May 20, 1919

Pulmonary Tuberculosis, caused by fungus growth in the lungs of the plant or germ, called tubercle bacillus, which multiply by divisions.

The bacillus may enter the lungs by way of the mouth and pass through bronchial tree to the alveoli, where they usually attack the tissue, although they may attack it at any place during the passage or may be conveyed to the lungs through the lymph or blood from some organ that they have previously attacked in other parts of the body. I believe I am safe in saying that the bacilli reach the lungs of most, if not all persons, sometime during life, for statistics show that about 96 per cent of all persons have tubercles in lungs on post mortem examination.

When the bacilli reach the lung tissue they may be killed at once by the cells in the tissue, as recognized by all physicians, or they may kill the tissue and cause it to break down and throw out toxins in the blood, with all of the symptoms of tuberculosis, or consumption, if you please. It seems that not all of the alveoli or terminal air cells in the lungs are used by man continuously and these remain collapsed when not breathing strenuously.

The tissue here has poor blood and oxygen supply and the bacilli find less resistance, so we have then two factors to deal with, the offending bacilli on one hand and the resistance of the tissue on the other. With good resistance, the tissue might withstand numerous infection of the most virulent type of the bacilli. With poor resistance, the tissue might succumb to a very slight infection of a non-virulent type of the bacilli, and we have all stages that may exist between the above extreme types, hence the very many types of tuberculosis.

In the minute anatomy it is said that a tubercle forms just on the inside and at the entrance of one of the alveoli. The air in passing in and out necessarily is obstructed by this projection and you have lessened oxygen in the alveoli with increased irritation, which causes the harsh breathing that we hear during auscultation.

In the gross anatomy several of these adjacent air cells become obstructed, filled with mucous, adherent, with poor blood supply and finally break down, the contents expectorated by the patient, leaving small cavity or you may have caseous mass formed and this in turn followed by calcification.

In the intermediate stage before cavity or calcified spot is formed, you have what is usually found on examination infiltration or consolidation.

One should take family history, past history, and present illness carefully, not forgetting that while tuberculosis is not congenital, it does occur in families from the fact that one member contracts it from others in family, from clothing, or infected rooms. You should have the chart with temperature and pulse taken every four hours during the day and notes on general condition of patient,

for two weeks previous to examination. You should have a second chart with outlines of chest on which to record your findings during examination and never trust to memory.

Have the patient sitting on a revolving stool in front of you with the light from above head coming down over chest, or back as the case may be. Have patient stripped to waist.

INSPECTION—Look your patient over carefully, back, front and sides for general conditions, local indrawings, emaciation over one set of muscles, lack of motion, pallor of skin, enlarged veins, sagging of shoulder on one side, prominence of clavical one or both.

PALPATION—Go over the entire chest with palm of hand pressed firmly against chest, have patient say one, two, three, or ninety-nine, and not the vibration transmitted to the hand in this manner. A consolidation area or cavity will cause an increased vibration, always remembering that in normal lungs vocal fremitus is greater on right than on left side, caused by the difference in anatomy of the corresponding sides. With the cavity you will have to determine whether it is filled or empty, because fluid transmits vibration readily but when tissue around the cavity is relaxed, this vibration never reaches the fluid and therefore you do not find it on examination. With thickened pleura the fremitus may be diminished instead of increased.

PERCUSSION—Go over the entire chest using middle finger as pleximeter and having this finger lying firmly against chest. Percuss with wrist motion and not with arm. Mark out with pencil over the apices the amount of resonance between neck and point of shoulder, then percuss front of chest lightly, comparing like points on each side and over entire surface. Then go over back and sides in like manner using a strong stroke over heavy back muscles and scapula. You will note diminished resonance over infiltrated areas, also greater resistance to finger in contact with chest at this point.

AUSCULTATION—Go over entire chest again, as before, with stethoscope (Ford's). The stethoscope should fit the ear perfectly, chest piece, small and in good contact with chest contour. If skin is rough or hair exists on the chest, moisten the chest with warm water, otherwise you will not be able to interpret what you find. Go over the chest first with patient breathing regularly and full, then go over it as follows: Have patient blow out breath, cough once lightly and take in breath. Keep this up each time stethoscope is applied to chest. Exhale, cough, inhale, making this one continuous performance. This is hard work and the patient will have to rest often during examination. In this manner you will often be able to bring down a shower of rales, when under ordinary full breathing they would be absent. On the other hand, clearing up large rhonchi on the bronchial tree caused by some other condition, keeping in mind the fact that what we are concerned with in tuberculosis, in the incipient stage, is the condition of the air cells at the end of the bronchial tree, and not the bronchial tubes themselves.

Low pitched, bronchial breathing is heard over moderately large cavities in lungs and called cavernous. High pitched bronchial breathing is heard over consolidated areas and known as tubular breathing, more often found in pneumonia, but may be found over an infiltrated area in tuberculosis.

What has been said of vocal fermitus is true of vocal resonance and one should go over chest comparing like points on both sides. This cannot be

emphasized too much, for you will have to find what is normal lung tissue in each individual case and compare this with what is abnormal. The friction sounds in dry pleurisy should be studied carefully, for it is very easy for one not familiar with chest work to confuse it with rales. Very often you have both friction and rales heard over the same spot. The time rales occur and the effects of cough upon them will help to differentiate.

You have interrupted, or cog-wheel breathing, caused by irregular expansion of the alveoli and the obstruction at the entrance by the tubercle. Another very interesting sign that is very often given little attention, is the prolonged expiration as compared with inspiration. This is caused by lack of elasticity in the air cells and probably by obstruction also.

I will not mention tuberculin, either for diagnostic or therapeutic purposes, other than to say it should be used by experts only, preferable in the sanatoria of the country, for it can do much harm and has only a limited value in selected cases.

If you will refer to your charts, after thorough examination as outlined above, you will find the affected areas covered with pencil marks, and that each of the methods, inspection, palpation, percussion, and auscultation point to the same area or areas. This along with your temperature and pulse record, together with general conditions, as noted, will convince you and your diagnosis is made.

Bacilli in the sputum may be present or absent. If present, they will be pathognomonic. If absent, it will mean nothing, or probably an incipient case, if other symptoms and signs are present. The physician who waits to find the bacilli in the sputum before making his diagnosis, will never make a diagnosis of incipient tuberculosis. One important fact should not be overlooked. All patients that have had a hemorrhage from the lungs, especially, if after coughing, and blood is mixed with froth, should be looked upon as tubercular, until proven otherwise. Treatment should be started at once, and many who would otherwise become advance patients can be cured.

TREATMENT—Patients should have the benefit of your knowledge and should be told that they have tuberculosis, for he or she, as the case may be, if cured, will have to accomplish it by following out diligently a physician's instructions, and not by one or more drugs he may prescribe. They should be told this in nearly every case, with probably a few exceptions. They should be sent to some sanitorium, for say, four or five months to be treated, but more especially instructed about what they need to do to get well, and how to protect themselves from reinfection and those with whom they come in contact from infection.

They should be told that they have tuberculosis. That they can get well if they desire and will pay the price of eternal vigilance. That it is a dreadful disease, as most people term it, but on the other hand, thousands of people get well every year, as statistics show that most people have been infected sometime during life and have had symptoms varying from a bad cold each winter to the worst form of consumption, as it is generally known by the laity.

Just here I think we fail to do our duty and I somtimes think it is because we are afraid of losing our practice. We say that if we tell them they have tuberculosis they will go to another and another physician until they find one who will tell them otherwise, put all their trust in him and settle down to die comfortably from

catarrah, weak lungs, asthma, etc. This is not an argument for not doing our duty.

But it is rather interesting why we do this in tuberculosis and are so ready one and all to sell our diagnosis in other cases just as bad. Think of Yellow Fever, Bubonic Plague, Small Pox, Influenza and Cancer. We do not consider the shock it will cause the patients in these cases, but use every effort to hasten the diagnosis for the patient's sake and more especially those around him. After being told about their condition, we should outline for them what their daily routine should be, and should see them once or twice a week, even if they are mild cases, to go over their duties and to encourage them, always remembering that they are pupils trying to learn a difficult lesson, and that their friends and relatives are usually their worst advisers.

If running a temperature or pulse above normal, they should stay in bed until they become normal. The temperature and pulse taken every four hours during the day by nurse or patient, if no nurse is avaliable. In most cases they will be able to take a general diet, with emphasis on the general. They should take a glass of milk at each meal, and nourishment (milk) between meals and at bedtime. Eggs may be used in general diet sometimes and to replace the milk at other times, if indicated, but avoiding large quantities of milk or eggs in any one day, as they are liable to cause indigestion.

It has been said that the stomach is the most vital organ in the treatment of a tubercular patient, and his chances to get well depends more upon it than any other organ.

After temperature and pulse have been normal for a few days, they may be allowed to sit up from a few minutes to a few hours each day, and later a short walk morning and afternoon. These walks may be extended as the patient improves to regular graduated exercises, but all the time keeping in mind the general condition. If the temperature and pulse go up, they must go back to bed and start all over again. Here is where you will have to encourage your patient and at the same time tell him the whole truth, for it is just the first hard lesson. One prominent physician said that if he had incipient tuberculosis today, he would go to bed and stay for three months.

This treatment must be carried on until the patient is well, without bacilli in the sputum, cough, pleurisy, indigestion, pallor, temperature or active symptoms for three years. The patient must then take the best general care of himself for the remainder of his life, for any contagious disease as influenza, pneumonia, typhoid fever, or anything that may lower the patient's resistance might cause a flare-up of the old condition by breaking down the walled-off lesions that have not been completely calcified.

All the sanitary conditions should be carried out to the fullest extent, such as drinking and sputum cups, gauze over the mouth when coughing or sneezing. All dishes and paraphernalia used by the patient should be sterilized, as well as rooms occupied by the tuberculosis patient. Last but most important is fresh air. Air not contaminated by animals, plants or any irritating substance. To make this condition the air will have to have its essential elements and nothing more. This is done by ventilation. It should be warm enough to be comfortable, varying however with the individual and zone in which he lives. Some patients can stand more cold, having been accustomed to it. All patients can stand

more cold in a dry climate. This is where the sanatoria throughout the country sometimes fails by trying to get some fixed rule for all patients in all climates.

Patients should stay out of doors day and night, with few exceptions, and these exceptions are just as important as the general rule. In a warm climate, or in a dry, cold climate, they will probably be able to stay out all of the twenty-four hours, but in a changeable climate, where they have sudden changes in a few hours, with violent storms, the patient should be indoors and made comfortable for this period, otherwise he will be exposed, and when the outing reaches the point of exposure you are doing your patient harm and not good. Air does not have to pass over a patient at the rate of 75 miles per hour to be fresh. Cold air is a tonic to the lungs, but violent cold is an irritant.

Then again, air should be free of dust, soot, lint, and irritating material of any kind. It has been said that mechanical things in the air cause more trouble than the chemical changes that may take place and experience bears this out, for we know that patients do not get good results by opening their windows like they do by sleeping out in tents where they are free from all irritation substances that exist in rooms.

The sanitoria over the country now have the sleeping porch with a comfortable dressing room at the rear. This porch is protected on the North and West and open on the South and East, furnishing ventilation and protection, also sun-light, which is one of the greatest foes of the tubercule bacillus.

Briefly then, the bacilli in the sputum, hemorrhage from the lungs, find moist rales, persistant after cough in apices of lungs one or all of these symptoms are pathognomonic of tuberculosis and treatment should be started at once.

EXTRA-UTERINE PREGNACY
Report of 47 Cases

CHAS. F. HICKS, M. D.
Welch Hospital, No. 1
Welch, W. Va.

Read by Title at Annual Meeting, West Virginia Medical Association, Clarksburg, May 20, 1919.

This paper is based on forty-seven consecutive cases of Extra-Uterine Pregnancy, operated upon within the past ten years, (January, 1908-January, 1918) with no fatality.

The average age of the patients was thirty years;

The oldest was forty-four years;

The youngest was 18 years;

Ten of these patients had not had children;

Six had only one child;

One patient's youngest child was twelve years;

One patient's youngest child was fourteen months.

Extra-Uterine Pregnancy is a term which embraces all pregnancies occurring outside the uterine cavity, i. e.: tubal, including the interstitial type, tubo-ovarian, tubo-abdominal.

Davies-Colley classifies the cases, based upon the symptoms and on the pathologic findings, which seems adequate for the purpose of differentiation.

His classifications are:

First, Diagnosis either before or after primary rupture occurs with the ovum still developing.

Second, Diagnosis at the time the rupture occurs, i.e.: the so-called acute cases.

Third, Diagnosis of Tubal Mole or Tubla Abortion, i. e.: the sub-acute or chronic cases.

The two principle pathologic forms as recognized as having special clinical manifestations, are the acute, or ruptured and the chronic or abortive.

Tubal rupture is applied to the condition in which the outer wall of the tube constituting the external capsule of the ovum, ruptures and allows the maternal blood to flow unimpeded into the peritoneal cavity, which gives rise to the classical picture of sudden collapse.

In Tubal Abortion, rupture takes place in the fetal capsule but not in the wall of the tube itself. In this condition the blood flows less rapidly, and probably time being given for clotting, but is likely to trickle slowly into the peritoneal cavity, or may form a hematoma in the interior of the tube, called "Tubal Mole."

Predisposing Causes:

First, Mechanical interference with the passage of the ovum through the tube, such as tumors, cysts, convoluted course of tube, bands constricting the tube, congenital anomalies and malpositions of the tube, congenital or acquired.

Second, Pelvic inflammation, producing loss of cilia and epitheum of the tubes—no doubt this produces a fair share of occurrences, if it is not the greatest factor, evidently this is a very low grade of infection.

I do not believe that Neiserian infection is a frequent forerunner of tubal pregnancy, as most writers claim.

In our series of cases, the pathology of the adnexa, from a macroscopical appearance, gave very little information upon this point.

Extra-Uterine Pregnancy may occur at any time, in the child-bearing age, but the greatest frequency between the ages, thirty and forty, long period of sterility may predispose to Ectopic Pregnancy; it occurs five times as frequent in multiparae as in primaparae.

There were evidences of previous diseases of the tubes probably causing loss of cilia in about six cases; there were cysts of the ovary in two, none had fibroids. Not one had been operated upon previously for any pelvic lesion. There was very little in the histories to place any cause on a basis of certainty; hence a great majority of the cases no cause could be obtained. The ages ranged from eighteen to forty-four, so no valuable information could be placed here.

The time of occurrence of the rupture from the date of marriage, the records are not complete, but in one case, which was the earliest, was four weeks, absolutely with no history of infection. In another case, the patient, forty-four years of age, who had been married the second time, and had lived with her first husband eighteen years with no pregnancy, and had lived with her second husband five years and the Ruptured Tubal Pregnancy was the only pregnancy.

From the time of rupture to the date of last pregnancy, seven cases gave a history of sterility six years, a majority showed a period ranging from two to five years. One case had recurrence Ruptured Tubal Pregnancy, one and half years later, which is the only one I have any knowledge of; in three cases the child showed signs of life, for a few seconds, these were, I presume, about the end of four months, and were proportionally developed.

Our records show that it occurs more frequently in the white than the colored, the ratio being, probably five to one. In view of the fact that salpingitis, especially those due to the Neiserian infection, is much more frequent in the colored

than the white, is not in keeping with the statement that the Neisserian infection plays such an important role. In our Gynecological service, the tubal infection of the Neisserian type occurred in the proportion of four colored to one white.

Hirst estimates that Extra-Uterine Pregnancy occurs, one in every five hundred cases of pregnancy, I question if it is not more frequent, as one physician in McDowell County has sent eight cases to me, within the past ten years.

Noble makes the statement that three and four per cent of his gynecological cases were Extra-Uterine Pregnancy.

The Johns Hopkins Hospital Bulletin shows that one and three-tenths per cent of the gynecological cases operated upon within the past ten years were Extra-Uterine Pregnancy. In our gynecological service the record shows about two per cent.

To summarize briefly as to the cause, it is noted a majority of our cases no cause could be obtained, however microscopical examinations of the specimens were not made. As to ages—it ranged eighteen to forty-four, marriages ranged from four weeks to twenty-three years; mechanical interferences, only two had cystic ovaries, no other tumors; very small per cent showing evidence of previous diseases, and ages of last child ranging from fourteen months to twelve years; a majority of the cases had previously borne children, and I believe 20 per cent of the cases have since borne children.

The Diagnosis of Ruptured Tubal Pregnancy, or the group of acute type, is comparatively easy. For example, one is called upon to see a woman of the child-bearing age, who has missed one or more periods, and who has a sudden, severe, tearing, one-sided, lower abdominal pain accompanied by collapse, pale and weak with a small thready pulse, sighing respiration, thirsty and cyanosed, tender, and rigid abdomen, nausea, and probably vomiting, and Claybrook's signs, is usually sufficient to arrive at a correct diagnosis without further examination.

It is this type of cases where hemorrhage may prove fatal in a short time. Catastrophies of this kind, however, are comparatively uncommon. Findley reports a case, the wife of a medical friend of his, where death occurred three hours after the beginning of the attack.

In the sub-acute and chronic type, the typical picture differs somewhat from the acute, fortunately it is more common than the acute; there is a similar history of a missed period, and she may suspect she is pregnant, as she has the subjective signs, which may not differ materially from those of uterine pregnancy of a similar age. In the latter part, the signs do not conform to those of normal pregnancy; she begins to have discomfort in the lower abdomen, probably with attacks of severe cramping pains, followed by a vaginal flow; and during these pains, rupture of the gestation sac may occur.

At the Mayo Clinic, a report made by Mussey, in the study of 168 cases, Mussey claims a diagnosis was made in 106 cases, a great majority in this group, the sub-acute or chronic.

Out of 106 cases, taken as a whole, reported by Oastler of New York, six were diagnosed before rupture, seventy after, and thirty, improperly made.

In our series of cases, that fall under the sub-acute or chronic type, I do not believe that we made a diagnosis in ten per cent of the cases.

To summarize briefly the clinical diagnosis of Extra-Uterine Pregnancy, leads to the conclusion that there is no one di-

agnostic symptom, pecular to the lesion. Diagnosis in the unruptured cases certainly are few.

In the acute or ruptured group, the symptoms—complex however, if complete it is comparatively easy. In the sub-acute or chronic, the value of the careful history taking, and the careful analysis of the clinical findings, plus the pelvic bimanual examination, should leave fewer unmade diagnoses.

We do know that cases occur without any warning, and prove disastrous before surgical aid can be obtained. Williams cites a case, multiparous woman, with a perfect normal menstrual history, who died from hemorrhage following rupture fifteen days after her last period.

In exploratory operations for pelvic lesions, and a tubal mole is found, if the history is retaken in the light of the findings, it will usually be found that symptoms were present, but were not differentiated from the symptoms of the supposed disease, for which the original operation was undertaken.

I have been impressed with this fact on finding an undiagnosed, old Extra-Uterine Pregnancy, when I had made the diagnosis of cyst, pus tube, or probably fibroid. After the recovery of the patient it is interesting to note that the patient will be able to give a satisfactory history.

In reviewing the symptoms, the cardinal points, in the acute type, are, 1st pain, which is found to be the most constant symptoms, which is violent, sharp, lancinating in character, in the lower quadrant, and later becoming general, which is soon followed by marked symptoms of concealed hemorrhage. In the sub-acute or chronic type the patient will have one or more attacks of pain, not so severe, intermittent and colicky in character referred to one of the ovarian regions.

2nd, flow, the uterine hemorrhage is usually intermittent, again it may be absent; the flow is closely associated with the pain; uterine bleeding in the sub-acute or chronic type may occur first, but the patient may have several attacks of pain, and as a rule the flow may be increased with each attack; at first bright red, later dark and sticky.

3rd, Pelvic Bimanual examination in the acute type is unsatisfactory, owing to the extreem tenderness of the abdomen; in the sub-acute or chronic type a pelvic mass may be made out which seems to be independent of the uterus.

There are several acute abdominal conditions, similating ruptured Ectopic Gestation.

1st, appendicitis, but here we have none of the general and local signs of pregnancy; the pain in appendicitis persists through the attack, while in ruptured tubal pregnancy, it may be momentary. Collapse following Ruptured Tubal Pregnancy, never occurs in appendicitis; the history of course varies, but is different. An incomplete uterine abortion is hard to distinguish from tubal abortion; two of our cases were curetted before sending to the hospital.

The history in both conditions may correspond; under a few days observation the condition will change in the incomplete abortion, the flow is generally more marked, brighter red, while in tubal there is more pain, and the flow darker and sticky in character. Renal and hepatic colic should not be difficult to diagnose from Ruptured Tubal Pregnancy.

Torsion of the pedicle of an ovarian cyst may give rise to symptoms of Ruptured Tubal Pregnancy, but the signs of

concealed hemorrhage is absent. The presence of a long-standing tumor, and the absence of pregnancy should suffice for making a diagnosis.

In the purulent inflammatory conditions of the tubes, it may be difficult to exclude, but the history does not correspond with Ectopic Gestation, as a rule there is no missed period. Salpingitis is slower in onset, and patient carries a low grade temperature, which is not true in Extra-Uterine Pregnancy.

Laboratory Findings;—in acute type laboratory examinations are seldom done, as from the general appearance of the patient, who presents the signs of internal hemorrhage, probably in the superlative degree, invites one to get in quick and get out quicker. In the chronic type, where the greatest number occur, probably the laboratory findings are of some value. When you have a history of pain, acute, sudden in onset in one of the ovarian regions, delayed menstruation, or perhaps missed period, followed by irregular flow, the first thing to think of is Ectopic Gestation. The fact that the moment of the attack she was in her usual health.

As to the Operative Technic, it is not my purpose to discuss this part, however, I do not believe it advisable to wait in the hope that the patient might react from the initial shock. I believe at least, fifty percent of our cases had normal saline administered, intravenously, just prior to opening the abdomen; this is usually done by the assistant, or nurse who is trained in the operating room.

After the tube has been removed, to facilitate the removal of blood from the abdomen, normal saline should be used. I do not believe in laundering the intestines, but all blood should be removed, if possible; occasionally a small rubber tube is used for drainage, for twenty-four hours.

In conclusion,—In a majority of cases, no cause can be obtained. In the acute type, the diagnosis is easy, and the attending physician usually arrives at this before the Surgeon is consulted. In the chronic type, fortunately embracing the majority of cases, the prognosis is favorable; and here the careful history taking cannot be too greatly emphasized, as it is more valuable in arriving at a correct diagnosis than the physical findings.

There is no argument in favor of removing the other tube, to prevent subsequent rupture, however, Grave's figures, who has collected valuable statistics on this subject, show that only about 33% have normal pregnancies later, while about 15% have a repeated Ectopic Pregnancy. At least 20% of our cases have since borne chilrden, and only one a recurrence, so far as I can ascertain.

Announcements and Communications

American Proctologic Society will hold its Twenty-first Annual Meeting, Memphis, Tenn., April 22 and 23, 1920. Guests of Dr. John L. Jelks and of the Memphis and Shelby County Medical Society.

Headquarters—Hotel Gayoso
Meeting Place—Hotel Gayoso
Clinics at—(Memphis Gen'l Hospital
(Baptist Memorial Hospital
(University of Tennessee

The profession is cordially invited to attend all sessions.

A Ladies' Committee will provide entainment for ladies accompanying those in attendance at the sessions.

AMERICAN PUBLIC HEALTH ASSOCIATION TO CELEBRATE 50TH ANNIVERSARY

Next year the American Public Health Association will conduct its 50th annual meeting. An interesting circumstance is that Dr. Stephen Smith, the founder and first president of the Association, will at that time be approaching his 99th birthday. Dr. Smith is still hale and hearty and possesses his faculties to a remarkable degree. It is his intention to read a paper at the meeting referred to. His vigor at a ripe old age exemplifies the results of sane living.

The American Public Health Association was founded at New York City in 1872. Until a few years ago it remained a strictly scientific body, somewhat on the order of the royal societies of Europe. More recently the membership has been broadened so that those may join who have a more general interest in public health, including such workers as health officers, laboratory men, school medical inspectors, industrial hygienists, public health nurses, physicians interested in preventive medicine, etc.

Dr. S. L. Jepson of Charleston, who is Vice-President of the Association, is chairman of the committee on membership for the state of West Virginia. Those interested in the objects of the Association are invited to correspond with him. If membership is desired or the Journal, send five dollars.

Members of the Association receive the American Journal of Public Health and the A.P.H.A. News Letter monthly, together with the customary Association advantages. Dues are $5 per year.

The American Public Health Association stands as an honored institution which during the years has been tremendously influential in bringing the new methods of public health into use. Certainly no health worker can offord not to be a member, or to miss it publications.

February 25, 1920.

The Editor,
West Virginia Medical Journal,
Huntington, W. Va.

Dear Sir:

If possible, will you consider the publication of the following letter, or so much of it as you deem suitable for your journal:

"To all physicians who served the Federal Government during the War:

An association of Medical Veterans of the World War was organized at Atlantic City, in June, 1919, at the time of the meeting of the American Medical Association, and a constitution and by-laws adopted. About 2800 physicians have already joined and all other who are eligible are invited to join the society.

The Constitution states that 'The Dominant purpose of this Association Shall Be Patriotic Service. The objects of this association shall be: To prepare and preserve historical data concerning the medical history of the war; to cement the bonds of friendship formed in the service; to perpetuate the memory of our medical comrades who made the supreme sacrifice in this war; to provide opportunity for social intercourse and mutual improvement among its members; to do all in our power to make effective in civil life the medical lessons of the war, both for the betterment of the public health and in order that preparedness of the medical profession for possible war may be assured.'

The organization of the society provides for state and local organizations wherever the member desire it, and in some states, such as Wisconsin, organization has already been effected.

It is desired by the National association that those who are already members meet together in larger and smaller groups, at the first convenient opportunity, and effect a local organization with a chairman and secretary, and also at the next meeting of the state medical society that a place be provided on the program for the Medical Veterans.

The organization of the society is based on democratic principles and it is hoped that the members who have already joined will take the initiative and organize their own state and local societies.

The national organization will assist by furnishing application blanks and copies of the constitution and by-laws, and, if desired, stationary.

The first things to be done after the organization of a state society is effected is to elect a councilor to the general council of the organization, to represent the state society at the next annual meeting of the Veterans at New Orleans on the first day of the meeting of the American Medical Association, April 26, 1920.

A badge or button for members of the society is being made and will soon be ready for distribution."

Yours very sincerely,

F. F. RUSSELL,

Secretary.

BOOK NOTICES

Symptoms of Visceral Disease. A study of the Vegetative Nervous System in its relationship to Clinical Medicine. By Francis Marion Pottinger, A. M., M. D., L. L. D., F. A. C. P., Medical Director, Pottinger Sanatorium for Diseases of the Lungs and Throat, Monsovia, Cal.; Professor of Diseases of the Chest, College of Physicians and Surgeons, Medical Department, University of California, Los Angeles, California; with 86 text illustrations and nine color plates. Price, $4.00. C. V. Mosby Co., St. Louis, 1919. This volume is evidently the result of deep study, intelligent observation and extensive experience. The author's aim is to show not only that diseases cannot be intelligently and successfully treated as affections of any one part or organ only but that the one part cannot be diseased without more or less affecting other parts and to show the manner or process of such affection and the logical treatment of the pathological condition as a whole. A point of interest in the discussion of the subjects is the emphasis laid on the importance of the "vicerotrophic" reflex which is so often the cause of many puzzling symptoms found in many disorders the practitioner has to deal with. The work is arranged in three parts, parts one and two showing the application of the principles of visceral neurology to clinical medicine. Part 3 is made up of a brief review of the vegetative nervous system. While the treatise is deeply technical the profession as a whole is deeply indebted to Dr. Pottinger for the able and lucid manner in which he has presented an important and interesting subject.

The Medical Clinics of North America. Volume 3, Number 2. "New York Number." Published bi-monthly by W. B. Saunders Company, Philadelphia, London. Price $10.00 per year. It is useless to write many words about this volume of this well known publication, for when we write that it is up to the usual quality of the preceding issues we clearly express our opinion of its merits. The subjects covered by the twelve "Clinics" are on condition met almost every day in the busy practitioner's rounds.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
O. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., April, 1920

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription - - - - - - - $2.00 per year
Single Copies - - - - - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—H. R. Johnson, Fairmont.

FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

SECOND VICE-PRESIDENT—W. E. Vest, Huntington.

THIRD VICE-PRESIDENT—Joseph L. Miller, Thomas.

SECRETARY—J. Howard Anderson, Marytown.

TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

ONE THOUSAND MEMBERS

Recently Dr. Anderson sent us his first list of paid-up members for this year. There were only between three and four hundred names in this list. Upon first thought this would seem appaling. If we did not know that there are many members whose dues have been paid, but a return of which had not been made to the State Secretary, it would be.

It is very important, Mr. County Secretary, that you collect all the dues from the present members and make an immediate return of them to Dr. J. Howard Anderson, Sec'y., Marytown, W. Va. If the postal regulations are obeyed there will only be Three Hundred and Fifty odd men get the April issue.

Then let us all appoint himself a committee of one to see any recent arrival and get him into the Association before May first.

That Thousand will be Easy!

THE STATE DEPARTMENT OF HEALTH

Since the establishment of this department with its head located in the capital and devoting all of his time to the very vital question of the health of our citizenry, it has been very gratifying to see the continued efforts made to bring all the physicians of our commonwealth into closer co-operation. The war brought us face to face with many problems which demanded solution. Especially did the examining of the young manhood of the nation awaken the public to the gravity of the venereal diseases. Those of our profession who had paused to ponder the question were aware of the seriousness of the situation. As a result of this we have the U. S. P. H. S. taking the matter up and establishing Bureaus of Venereal Diseases, making them a part of the State Department of Health.

In the beginning we were much exercised over this departure from the customary and felt quite much doubt as to the good it might accomplish. While the work so far has shown nothing very startling, we feel sure that those who are giving attention realize that in a quiet and unostentatious way much good has been done and if we will but do our duty by aiding in every way possible far greater results will achieved.

One of the innovations of the State Department of Health through the Director of this bureau has been the sending of weekly letters to the physicians of the State. These letters pertinently bringing to our attention matters of concern to us. It is to be hoped that these are not consigned to our waste-baskets unopened.

In a recent one of these letters attention was called to the large number of illegal practitioners and their wide spread distribution throughout the State. It is stated that one of them actually enrolled in the school of instruction for teaching modern methods of treating venereal diseases AND GOT BY WITH IT!!

Is it any wonder that we are plead with to take an interest in politics and use our efforts to help elect men who will enforce the laws?

But there is another side to this. We can get men to enforce the law, provided we can secure conviction. Here comes the difficulty, you can present evidence of illegal practice and still not secure an indictment by a grand jury. You might even get this and bring them to trial and yet not secure a conviction. This is rather difficult when members of the grandjury or the trial jury are patients of the defendent. This can happen. It has happened in at least one county in the State.

Until public sentiment is so aroused that you can secure indictments you can get no results. This brings us to face with the question as to the origion of the clientele of these charlatons, etc. May not we be to blame in the last analysis ourselves? Every "patient" they have has been to consult some one of us first, I'll venture. Maybe several of us. I wonder if we always earnestly tried to discover the trouble and cure the disease. We can do with our hydro, electro and mechano therapy in well regulated departments of our hospitals, all that the irregulars can.

Let us take an individual inventory of our sins of of omission as well commission in making these vampires possible. Let us by our own efforts mould public sentiment and appreciation of the physicians' worth and at the same time feel we can go before the courts with a clear conscience that we are not parties

to making these irregulars possible. Then we will get convictions.

In this connection (and in another letter) attention is called to a bill before Congress, H. R. 5123 entitled "A Bill Intended to Bar Quack Venereal disease Advertisements from the Mail." It is stated that the Congressman from West Virginia on Com. on Post Offices and Post Roads, Mr. Woodyard, is opposed to this bill. It is to be hoped that each physician in the State will write Mr. Woodyard insisting upon his support of this bill as originally written without ammendments, both before the Committee and on the floor of the House that it be passed.

THE MARCH ISSUE

We must apologize for the delay in the last issue reaching the members.

It was due to difficuties in securing labor in the printing office. This has been arranged finally and we have the assurance of the printer that future issues will be out on time.

TRIBUTES TO TWO GREAT PHYSICIANS

DR. WILLIAM OSLER

Sir William Osler died at his home at Oxford, England, on December 29. No announcement that could be made could carry with it more regret to the medical world or a greater sense of personal loss than this. Having remarkable social gifts, teaching medicine and doing consultation work in four widely scattered medical centers, it is probable he was better known to English speaking physicians than any other man. He came of a cultured family and received a thorough scholastic training before taking up the study of medicine; without these advantages no man can hope to reach the highest success in medicine. That he appreciated this is shown by the beautiful dedication of his practice of medicine to his old teachers.

Through all his work the personal element is strong, no man ever had more devoted friends than he, and no man ever returned their friendship with a greater loyalty or more unfailing memory. All the world knows of his preeminence in clinical medicine and of the fact that his book has had a larger sale and is more frequently consulted than any other medical work. This is not entirely due to the scientific value of the book. It is in part owing to the charm of his literary style. Nothing in medical history or literature escaped him, and he was well read in all literature, modern and ancient. He used it all to entertain as well as to instruct.

It is not, however, of his scientific, but of his personal side that we wish to speak. There is one class of physicians to whom he was better known, and who probably experienced more of his kindness than any others and these are the hospital interns. These young men are merciless critics, but their judgment of their chiefs is apt to be just and these give him an unqualified loyalty. There remains in the mind of every one of these his cheery, musical hum and swinging strides as he came down the hospital aisles followed by a group of interns and other young doctors, all eager to catch the words of wisdom that fell from his lips, the look of bright expectancy in the faces of the ward patients where

> "The clammy lips of fever smiled
> The welcome which they could not
> utter"

the kindly glance, the sympathetic smile as he talked with them, the thorough examination and the keen quest that was pathologically new or unusual. Writing

notes, for such a man was a pleasure interspersed as they were with amusing comment and kindly fun. The interns saved their necropsies whenever possible until Sunday and Dr. Osler came early in the morning and stayed all day. Those were never-to-be-forgotten Sundays. President Garfield said that his idea of a university was a log in the woods with Mark Hopkins at one end of it and student at the other.. Similiarly it may be said that the best medical school ever devised consisted of a necropsy table with Dr. Osler at one end and a hospital intern at the other. He seemed especially pleased if he found at necropsy something that had been inrectly diagnosed clincially or not diagnosed at all. On making such a discovery he would send out runners to round up all the interns and show them what a great mistake he had made and how they could avoid a similar one. Any intern who did not come when thus summoned because the object of his good natured impatience, raillery and jokes. His habit of joking about serious matters was not always understood by the public and at one time brought him a great deal of undesired notoriety as all the world recalls.

Dr. Osler never lost sight of his younger friends, no matter how far time and distance might separate them. Years after his intern days, the writer was pleased to receive from him at Christmas, a copy of Matthew Arnold's poems, inscribed with his name, and other old associates were similarly favored.

When he left Philadelphia for Baltimore, the resident physicians at one of the large hospitals tendered him a farewell dinner. He gave us a whole evening of his valuable time, told us his wittiest stories interspered with solid chunks of good advice and made us feel that our success was his greatest concern. Then there was the great dinner in New York, tendered him by the medical profession of America when he left America for England. The company was made up of the representative members of the profession of the United States and Canada.

The scene when this modest, little man stood up and received the homage of a great profession has never been paralleled in the history of medicine in this country.

There is a melancholy pleasure in recalling these things, so inadequately told, of our dead teacher and friend.

Penn. M. J.

DR. CHRISTIAN R. HOLMES

Recognition of a Great Medical Career

To the Editors—In our country there are few formal means for recognizing in any public way the services of a great physician or a great teacher. In the older countries such services have been recognized by the bestowal of honors, or nobility or grants of money, or by other official means which call attention to the services rendered. In our country no recognition through official order may be given, and we are glad to have it so, because, admirable as such prizes are when worthily bestowed, they become too often the playthings of political favor or of personal privilege.

In the case of Dr. Christian R. Holmes, whose death the medical profession deplores, action has been taken by the Carnegie Corporation of New York to give notable recognition of his services to the science of medicine and to medical education. Immediately after his death the Carnegie Corporation appropriated $250,000 to the University of Cincinnati for the endownment of a chair of clinical medicine to bear forever the name of the Christian R. Holmes Chair of Medicine. The information concerning this action was conveyed to the University of Cin-

cinnati in the following telegram signed by Hon. Elihu Root, Chairman of the board:

The trustees of the Carnegie Corporation of New York at their meeting held this day have appropriated the sum of two hundred and fifty thousand dollars which they tender to the Medical Department of the University of Cincinnati to endow the chair of clinical medicine in honor of Christian R. Holmes and to bear his name. This action is in recognition of Dr. Holmes' great service to medical education.

Eevery man who is interested in the progress of the medical profession and who knows of the intelligence and devotion that Dr. Holmes gave to his work will feel a sense of satisfaction at this recognition. Philanthropists and endowed foundations that give money for the promotion of science and education generally attach to their gifts conditions which require the institution or individual to raise additional means. In this instance the Carnegie Corporation makes no conditions but tenders this money generously and heartily, to commemorate the service of a physician of Cincinnati to his city, to his state, and to the nation. It is a fine thing for a great foundation to make such a heartly and spontaneous tribute to the service of Dr. Holmes. In the opinion of the corporation, he has rendered a notable service to medicine and to medical education. A dozen years ago, medical teaching in Cincinnati was in the same condition as in all our great cities; the work was carried on oftentimes unselfishly, sometimes from professional motives; but in the main, medical teaching was a by-product of medical practice. Dr. Holmes was a member of that group of American physicians and surgeons who helped to bring about a new conception of medical teaching and to lift our medical schools free from commercialism. Through his efforts and those of other men equally devoted, there is in Cincinnati a medical school, a part of a university, having high standards and scholarly outlook. There was built through Dr. Holmes' exertion one of the great public hospitals of the world, planned after a study of all the hospitals of Europe and America. This hospital, although a municipal hospital, is under the control of the University of Cincinnati College of Medicine and politics has been completely eliminated from its management. The medical school stands adjoining the hospital, and together they offer most admirable clinical opportunities for medical students. The University of Cincinnati College of Medicine promises to be one of the great medical schools of the world. To have wrought this work with such farsightedness, such scientific sincerity, and with such success as Dr. Holmes did, was to render a notable service to medicine and to medical teaching, and it is this service which the Carnegie Corporation desired to honor.

Other men in Cincinnati worked for the same ideals and contributed to the same purpose. Dr. Holmes would be the first to wish that they might receive full credit. His service would have been impossible without their support and cooperation, or without the consistent and able support of President Dabney of the University of Cincinnati. The Carnegie Corporation of New York forgets none of these things, but the trustees felt sure that every physician and every teacher who has wrought in the medical schools of Cincinnati will agree that there should be a special testimonial to him whose leadership and whose devotion have re-

sulted in such fruitful results for his city and for his country.

HENRY S. PRITCHETT, New York.
President, Carnegie Foundation for the Advancement of Teaching
J. A. M. A.—2-7-20.

State News

Dr. C. H. Ice, aged 65 years, for thirty years a practicing physician of Mannington died suddenly, March 21st of heart disease.

R. A. Boice, of Sistersville, Lieutenant in the M. C., has been honorably discharged from Army service.

Dr. O. T. Hines formerly located at East Lynn is now practicing in Huntington.

Dr. K. D. Graves and S. S. Gale of Ronoke, Va., were recent guests of the Mercer County Medical Society.

Dr. H. S. Crary who for a number of years has been practicing at Athalia, Ohio, will again locate at Huntington.

The Formal opening of the Mountain View Hospital at Bluefield by Dr. H. G. Steele took place, March 18th.

Dr. Fred Marcum was elected Mayor of Ceredo in a recent election held there.

Born to Dr. and Mrs. J. A. Guthrie of Huntington, a son.

At the Clinicial Conference of the Staff of the Ohio Valley Gentral Hospital held March 23rd, the following program was given:

1. Suppurative Nephro-lithiasis. Nephrectomy..... Dr. Hupp
2. Osteo-Myelitis following Typhoid, ... Dr. Linsz
3. Diagnosis of Central Pneumonia ..... Dr. Hall
4. Blood Stream Infections.....Dr. Keesor
5. The Chronic Antrum.....Dr. Hoge
6. The Laboratory's Part in Transfusion Demonstrations.....Dr. Mabel Clovis
7. Presentation of Pathological Material

The attending Staff was present together with the Other Physicians invited to attend.

Physicians who act in a professional capacity for railroads will continue to have the privilege of free railroad transportation. The clause in the railroad bill as it passed the House of Representatives, which would forbid free transportation to physicians, has been eliminated by the conference committtee.

The General Education Board, founded by John D. Rockefeller, has announced the gift by him of $20,000,000 for the improvement of medical education in the United States. The income of the gift is to be used concurrently and the principal to be distributed within fifty years.—New York Medical Journal.

The American Red Cross has announced an appropriation of $100,000 as a scholarship fund to induce graduate nurses released from the army and navy corps to train for public health nursing. A maximum scholarship of $600 will be granted for an eight months' course of training and $300 for a four months' course. The fund will be administered by the Red Cross Department of Nursing, and scholarships will be granted on the recommendation of Red Cross division

directors of public health nursing.—New Orleans Medical and Surgical Journal.

MEDICAL VETERANS OF THE WORLD WAR

Col. Frederick F. Russell, M. C., U. S. Army, secretary of the Medical Veterans of the World War, states that during February, 169 new members joined, making a total membership of 2,711 divided as follows:

Medical Corps, U. S. Army	1,245
Medical Corps, U. S. Navy	51
Medical Corps, U. S. P. H. S.	62
Contract Surgeons, U. S. Army	88
Acting Assistant Surgeons, U. S. P. H. S.	47
Members Local Board	527
Members Examiner, Local Board	183
Members Medical Advisory Board	508

Society Proceedings

MERCER COUNTY

The Mercer Medical Society met in regular session February 19th, at the Chamber of Commerce in Bluefield. The minutes of the last meeting were read and adopted. Dr. T. G. Tickle was elected to fellowship in the society. Under clinical cases Dr. W. H. St. Clair reported a case of encephalitis lethargica which was very interesting and was discussed very freely. The secretary has mailed this report to the Journal for publication. Under the papers we were fortunate to have with us Dr. S. S. Gale and Dr. Graves from Roanoke. Dr. Gale gave a report with the patient present and demonstrated it with lantern slides of a case of a rupture of the diaphragm with Hernia of the Stomach, Splee and Colon in the left pleural cavity with comminuted Fracture of the four lumber vertebra. He did a great piece of work and deserves to be congratulated. The discussion was opened by Dr. Scott and followed by Dr. W. H. StClair. Dr. Graves read of Typhoid Fever from the laboratory standpoint in which he brought out many interesting points from the view of the laboratory. The secretary has a promise of these papers to be published in the Journal at a later date. Dr. Gale gave an invitation to the Mercer Society to affiliate with The Southern Virginia Medical Association which he felt sure could be worked out in a satisfactory manner. A motion was made by Dr. Thompson to accept the invitation and for the chairman to appoint a committee to meet with the executive committee to formulate some plans for our association. The president appointed Drs. Rogers and Vass. There being no further business to be brought before the society it adjouned and retired to The Busy Bee Restaurant where a banquet had been prepared and spent a very pleasant evening together. A motion was made and seconded to adjourn to meet the third Thursday in March.

E. H. THOMPSON,
Secretary.

MERCER COUNTY

The Mercer Medical Society met in regular session in the Chamber of Commerce, Bluefield, on March eighteenth with president St. Clair presiding. A motion was made and seconded to dispense with reading of the minutes and proceed with clinical cases. Dr. Fox presented some very interesting cases of chickenpox which were freely discussed. Dr. Thompson presented a case in which the child was born at a premature age and it has never walked. Dr. Rogers reported a case showing the importance of the X-ray in the diagnosis

of empyema. Dr. Steele reported a very interesting case which he expects to report at the state meeting. A motion was made by Dr. Hoge that if Dr. Slusher would agree to give his picture at a later date to adjourn as the society was to be entertained by Dr. Steele at Mountain View Hospital. The application was received of Dr. J. G. Bishop and referred to the Board of censors. A motion was made adjourn after which the society retired to Mountain View Hospital and was highly entertained by the staff with luncheon, smoker and followed by dancing until twelve o'clock. Those who were unfortunate enough to be prevented from being present missed a rare treat. The society hopes to return again at some future time. The motion was made to adjourn to meet at Princeton the third Thursday in April.

E. H. THOMPSON,
Secretary.

McDOWELL COUNTY MEDICAL SOCIETY

Whereas—God in his Supreme Wisdom has seen fit to still by death the administering hand of our worthy and highly esteemed fellow practitioner, A.M. Spangler, M. D., Pageton, W. Va., and

Whereas—Dr. Spangler has, for many years, been a faithful and ethical member of McDowell County Medical Society, Therefore, be it

Resolved—That we, the fellow members of said Society, do herewith do homage to his long and faithful service in administering to and relieving the sufferings of humanity, in the Pocahontas Coal Fields; be it further

Resolved—That we feel his death has deprived us of a noble, conscientious co-worker, and a most able and delightful associate; be it further

Resolved—That, we, individually and collectively, wish to extend our heartfelt sympathy to his loved ones, in their hour of deepest anguish; be it further

Resolved—That these resolutions be spread upon the minutes of our Society, that they be published in the West Virginia State Medical Journal and that a copy be sent to the bereaved family.

Respectfully,
J. HOWARD ANDERSON
J. CLARK KILLEY
G. L. STRAUB
Committee

MEDICINE

The following is the formula for the new Haines solution together with technique in its use.

BY W. S. HAINES, M. D., G. P. POND, M. D. AND R. W. WEHTER, M. D., PH., D.

The composition of the improved Haines solution is:

Copper sulphate	5 gm.
Glycerin	250 c.c.
Potassium hydroxid	20 gm.
Distilled water to	1,000 c.c.

The copper sulphate is disolved in a mixture of the glycerin, and an equal amount of water, with the aid of gentle heat. The postassium hydroxid should be dissolved in about 200 c.c. of water and added to the copper solution with constant stirring, the whole being made up to volume with distilled water. This solution keeps indefinitely, although with many of the specimens of glycerin now obtainable on the market a reduction may be observed. If, however, the solution be allowed to stand in warm place for forty-eight hours, the clear supernatant fluid may be decanted or filtered from the precipitated cuprous oxid, without impairing its delicacy.

This solution may be used in the same manner as directed for the original

Haines solution, but a much more delicate and beautiful reaction is obtained as follows: Heat about 5 c.c. of the copper solution to boiling in a test tube, remove from the flame, and hold at an angle of from 30 to 40 deegrees. To this add, by means of a medicine dropper, from 10 to 20 drops of the urine, freed from phosphates as outlined above, in such manner that a distinct zone of contact is formed between the copper solution and the urine. The tube is then placed in an upright position and the reaction noted. If sugar is present in quantities exceeding 0.1 per cent., a brick-red or yellowish ring will immediately appear at the junction of the two liquids. If the amount of sugar is less than 0.1 per cent, ranging down to 0.03 per cent., the ring will appear in from a few seconds of slightly less than a minute, the smaller quantities showing slower reactions with a tendency to a more yellowish color of the ring. In urines containing no pathologic sugar, no ring of any kind will be noted at the zone of contact.

In order to determine whether this new Haines solution offered any advantage, in the performance of a contact test, over other qualitative sugar test solutions, comparisons were made with the solutions of Benedict and of Folin and McEllory. With the solution of Benedict, using the phosphate-free urine, a slight white contact ring was formed with normal urines and with sugar—containing urine no distinct ring, indicative of sugar, was observed until the solution had stood for considerably longer than was necessary with the Haines solution. When the solution of Folin and McEllroy was used with phosphate-free urine, the contact ring in normal urines was so marked that it could not permit of the use of this contact test.

This improved Haines test has the following advantages:

1. The reaction is concentrated to a single plane, thus increasing its visibility.

2. Only one heating is necessary, and there is no long standing before the reaction appears.

3. It will demonstrate pathologic sugar in amounts greater than 0.03 per cent.

4. It differentiates between pathologic and physiologic sugar.

5. It gives a clear-cut, decisive result in a minimum of time.

Transmission of Influenza.—The results of all human experiments with the Pfeiffer bacillus, with secretions, with direct exposure, with subcutaneous inoculation of filtered secretions and unfiltered blood, were entirely negative in the work reported on by Leake. Micrococci of the group found by Mathers as very frequent in the respiratoryy tract of influenza patients were similiarly inoculated without result. A sudden outbreak of 215 cases of influenza furnished donors for other experiments which also were negative. Two men, however, developed acute follicular tonsilitis, and a strongly hemolytic streptococcus became the predominating organism in the throat. In one of these patients the symptoms resembled influenza nine hours after onset. Transfer was then made of his secretions to ten more volunteers. In all of these ten, with one exception, the strongly hemolytic streptococus beeame the predominating colony, and five of the nine developed acute follicular tonsillitis about two days after inoculation. This other volunteer, five days after inoculation, suddenly began to have a headache, fever, prostration and cough, pains in the back, etc. At first his nasopharyngeal bacterial flora were not much altered but after several days of sickness, Pfeiffer's

bacillus began to be the predominant organism. The donor from whom the patient was inoculated apparently had an acute follicular tonsillitis due to the hemolytic streptococcus (beta type) though he had in turn received secretions from true cases of influenza. Another set of ten volunteers received the secretions obtained from an uncomplicated case of influenza four hours after onset. All of these remained well except one, who after thity-six hours began to have fever, pain in the back and chest, cough, anorexia, etc. The same bacteria were present after as before inoculation, but instead of the hemolytic streptococcus being predominant as at first, its place was taken by the Pfeiffer bacillus, which was second in importance before inoculation. Fifty-four hours after onset, an attempt was made to trasfer the infection by means of secretions to the final group of fifteen volunteers, but without success. It appears from these experiments that influenza is transmissible by means of the nose and throat secretions of persons suffering from the disease, with the nose and mouth as portals of entry, but that such transmission is far from a uniform result of such exposure; the first twenty-four hours of the disease were the most favorable for this transmission. The customary measures for prevention are therefore reasonable.

Lumbar Puncture in Syphilis. — P. Ravaut (*Presse medicale,* Ooctober 8, 1919) has found by experience that a syphilitic patient will consent to one or two lumbar punctures in the course of his illness but will refuse if repeated punctures are requested, owing to the discomfort entailed. However useful repeated punctures may be, therefore, the fact remains that but one or two can be carried out, and the question arises, under what circumstances shall it be most advantageous to resort to the procedure. Form observations in 1,000 patients in different stages of the disease, he concludes as follows regarding the indications for cytodiagnostic study of the cerebrospinal fluid: In any syphilitic presenting nervous disturbances, lumbar puncture will show whether the lesion is accompained by meningitis; it will also permit, especially through study of the leucocytic formula, of ascertaining the intensity of the meningitis and of following its subsequent progress. In any syphilitic presenting suspicious nervous disturbances or psychic manifestations, lumbar puncture will show whether the condition is of an organic nature or merely neurotic. In a syphilitic free of any nervous disturbance, the physician should practice lumbar puncture to make certain that there is no latent meningeal reaction. Puncture may be urged upon such a patient under two different circumstances. In a patient under complete charge of the physician himself, puncture should regularly be performed in the fourth year, after three years of treatment. If it proves positive, treatment must be continued until it disappears; if negative, puncture should be repeated in the tenth year, general rules as to treatment being followed meanwhile. In a patient merely consulting the physician to find out his condition, puncture should, in the absence of nervous manifestations, be postponed until the fourth year. If he first consults the physician between the fourth and tenth years, puncture should be carried out forthwith, while if he consults him after the tenth year, puncture while advisable, is less necessary, since after this year over seventy-five per cent. of patients giving positive tests already present manifest nervous disturbances. In a patient with obscure nervous disturbances, in the absence of any evidences

or history of syphilis, examination of the spinal fluid will permit of referring to syphilis, in some cases, symptoms which might otherwise have been wrongly ascribed to another cause.

Corpus Luteun in Neurological Practice.—H. Climenko, M. D., New York (*Endocrinology,* Jan.-March, 1919).

Climenko states that although it has been shown that there is hardly a vital function in the living organism that does not depend upon the internal secretions, and theories have been constructed to explain the relation of psychic processes to variation in secretion of glands, when we come to the therapeutic application of extracts of these glands, we are still far from having a scientific basis for our procedure. We are in doubt as to whether extracts of dead animal glands contain the same substances that are produced *in vivo.* The method of action of the organic extract is unknown. The action may be that of the hormone produced in life or it may be the action of dead tissue, *i. e.,* the specific action of new substance.

Clinko gives the results of a number of studies on corpus luteum. Cases in which therapeutic results were obtained as well as those in which they were not, are cited. He illustrates by one case the relation of the pituitary to the sexual glands, and states that amenorrhea should not always be attributed to changes in the sex glands, but inquiry should be made as to the condition of other glands. In one case where the thyroid, pituitary and ovaries were mainly involved, the addition of small doses of thyroid to corpus luteum extract finally cured the patient. Headache that occurs with menstrual disturbance is often relieved by corpus luteum. Climenko found that two grain doses is as large as need be used.

He concludes that (1) corpus luteum extract is effective only in the female; (2) that it acts best when native corpus luteum is present; (3) the administration of the extract cannot replace the function of the native corpus luteum extract in pregnancy and probably also not in menstruation; (4) when menstruation ceases as a result of disturbance of secretion, of another gland, corpus luteum will not produce menstruation; (5) its action is usually prompt; (6) the extract usually gives the same chain of phenomena.

Climenko therefore believes that corpus luteum has a specific action; extracts do not act as the native hormone; the extract in all probability stimulates the native corpus luteum to function. Contra-indications are abnormally low blood pressure and profuse and frequent menstruation.

Treasury Decision on Alcohol Prescriptions.—Treasury Decision No. 2940, which has just been issued by Daniel C. Roper, Commissioner of Internal Revenue, provides that under the new prohibition enforcement act, physicians who make application for intoxicating liquor must make an application for permit on Form No. 737 and must make a statement that the liquor is for use in the course of their professional practice only, and that it is to be used either in the compounding of medicines or for use without change for non-beverage purposes only. If more than two quarts are purchased in any one year, bond will be required.

Feeding Solids to Nurslings. — The availability of solid foods to the nursing infant, a procedure commonly regarded as dangerous and unscientific, is discussed by Lowenburg. Of 128 patients, seventy-six, or more than one half, received solid food between the ages of six

and eight months and thirty (about 25 per cent.) at the age of six months. None of these infants, except those suffering from severe diarrhea, received these prepared solids exclusively, i. e., milk in some form, either human or properly adapted cow's milk or both, was simultaneously fed. It is demonstrable, however, that the addition of these substances to the diet in early infancy is not only harmless but decidedly advantageous, and that less dependence need be placed on milk as an exclusive article of sustenance during this period of existence. In no case did vomiting occur as the direct result of beginning the administration of prepared solids. Diarrhea can be controlled absolutely and cured by the withdrawal of milk and milk foods and the substitution of properly prepared solids. Constipation is invariably relieved when the greater portion of the solid material fed is represented by green vegetables. The weight usually falls when milk is withdrawn entirely. The varieties of foods employed embraced all available and edible solids from either the vegetable or animal kingdom. Semisolids, such as cereals and soft eggs, were also included. No infant under 1 year of age was fed meat or fish. All varieties of cereals, eggs, potatoes, lima and string beans, spinach, peas, squash, carrots, beet tops, swiss chard, boiled lettuce, stewed celery, baked apples, prune pulp, practically formed the group from which selection was made. Meats and fish have been used with good effect between the ages of 1 year and 18 months. *J. A. M. A.* 1-24-20.

---

*Treatment of Syphilis in Tuberculous Patients*s Jos. A. Elliott, M. D. (Amer. Jour. of Syphilis, vol. 3, April, 1919). The author speaks of the not uncommon occurrence of finding both a syphilitic and tuberculous infection in the same person. The literature being full of data as to the incidence of tuberculous among syphilitics. The various investigators, however, worked on markedly different material, causing percentages to vary considerable. Tedeschi reports that 70 per cent of the cases of tuberculous developing during a period of ten years in his prison service occured on luetic soil. The other investigators' figures vary from 5 to 43 per cent. Bronfenbrenner attributes the frequencyof tuberculosis among syphilitics to the syphilis as such or to the antisyphilitic treatment lowering the resistance of the patient so as to make him more susceptible to a new infection of tuberculosis or render him less resistent against the progress of the disease already contracted. He refers to the enthusiasm many clinicians showed, a few years ago, following a report that tuberculosis was greatly benefited by mercurial injections. The author states this report was a little premature as it was shown that these patients who showed improvement had syphilis also and that results were only temporary.

According to Hartz (Jour. A. M. A., vol. 55, 1910) to the author and many other observers, mercury was shown to be detrimental to patients with tuberculosis. He says with the advent of Salvarsan, many optimistic results have been reported. The author's experience does not verify this. He gives many case reports of patients with a dual infection treated with arsphenamine alone and comes to following conclusions:

Mercury should be used with great caution in tuberculous patients.

The deleterious effect is not immediate but appears months later as pointed out by Hartz.

Arsphenamine is the drug of choice but should be given in small doses at long intervals as in his experience the ordinary dose accentuates active foci and is

proven to cause a flare up in latent lesions.

Deaths Follow the Eating of Ripe Olives.—The death of six persons in Memphis, Tenn., following the eating of ripe olives, with a fatal prognosis in a seventh case, are reported in the General News Department in this issue. Investigation has already revealed the fact that these deaths were due to *Bacillus botulinus,* the olives being packed by the "cold pack" method. The brief report thus far available indicates that the food product in question was a part of a salvaged stock and that the olives when found possessed a noticeably pronounced foul odor. Deaths have previously been reported from the same source in Canton, Ohio, Detroit and New York, and wide prominence has been given to the fact that all of these deaths followed the eating of ripe olives. And yet there will no doubt continue to be persons who will eat noticeably spoiled food, just as there are persons who attempt to outrace railroad trains over grade crossings, persons who step off moving street cars backword and some who refuse vaccination against smallpox.

Jour. of A. M. A.

Surgery

"THE OMISSION OF DRAINAGE IN COMMON DUCT SURGERY"

To the Editors—I have welcomed the important communication of Drs. Richter and Buchbinder on this subject in THE JOURNAL, December 6. Although undoubtedly not giving the last word, the authors serve the good purpose of stimulating controversy on the vital subject of drainage of the common bile duct—a subject which in greater part surgeons the world over seem to regard as settled.

The authors emphasize the desirability of closing the abdominal wound without drainage in order to avoid adhesions, taking it for granted, I presume, that it would be superfluous to call attention to the much more serious and occasionally disastrous results which follow the prolonged loss of bile by way of the incision into the common duct. To surgeons who are not prepared to follow the example of Drs. Richter and Buchbinder I would recommend drainage of the common duct by a small tube passed well into it through the cystic duct. This is the method practiced by me at present. The incision into the common duct is closed with great care and the line of suture tested by injections through the tube in the two ducts. On the third or fourth day the tube is clamped and, if the bile is found to pass freely into the ductus choledochus, is removed. Usually the leakage thereafter of bile is insignificant in amount; there may even be merely a slight stain on the first dressing after removal of the tube.

All that we gain as a rule by drainage of the bile duct is relief of tension. This relief is afforded by drainage by way of the cystic duct and tends to insure prompt healing of the line of suture of the common duct. Aside from the deplorable condition of the patient brought about by the great loss of bile, it seems irrational to me to place a drain in the infected common duct through the line of the incision into it with the expectation that primary healing of the wound in the duct will usually take place. Unquestionably the entire line of suture, contaminated inside and out with pus-producing organisms and further imperiled by the presence of the tube, has in many instances broken down.

Very slim cigaret drains (three or four or more) should surround the tube in the cystic duct and be removed with it on the third or fourth day. The gauze tips which serve to hold the drains in place should project hardly if at all beyond the gutta-percha shell. Such drains may be removed without distress to the patient. The suggestion of Dr. Follis to rotate them on their long axis when beginning their extraction is a helpful one. The sinuus leading to the cystic duct should be sterilized with bismuth paste or other antiseptic. I would warn against the use of Dakin's solution in so fresh a sinus lined by intestines. The results obtained by Dr. William C. Lusk by the persistent and frequent use of an antiseptic in the treatment of rectal fistula are significant.

W. S. HALSTED, M. D., Baltimore.
Jr. A. M. A.

THOROUGH STUDY VERSUS EXPLORATORY INCISION IN GASTROINTESTINAL LESIONS.

Dr. JOHN H. GIBBON, of Philadelphia, in a paper on this subject, said that it was admitted that the socalled exploratory incision was a justifiable surgical procedure under certain circumstances. There should, however, be an honest effort on the part of internists and surgeons to reduce and limit these circumstances. It was very easy to fall into the habit of "exploring" or "opening to see," but it required some effort to develop the habit of studying our patients carefully, of weighing symptoms and giving them their relative value, and of taking into consideration the contraindications as well as the indications for operation. The easily acquired habit rendered one a poor internist or surgeon, with little likelihood of further development, while the other made him a man whose opinion carried weight and who was likely to progress in knowledge with experience. A common excuse for neglecting proper study and resorting to immediate exploratory incision was the supposed urgency of the patient's condition and the saving of time. While this excuse might be legitimate in one case, it was not applicable in nine out of ten socalled emergencies. His own experience led him to believe that errors in diagnosis and the mistake of doing an unnecessary operation were not due to ignorance but to carelessness, to what might be called "cocksureness." One of the great disadvantages of an incorrect abdominal diagnosis was the fact that in order to reach satisfactorily the real lesion, another abdominal incision might be necessary. Another point which was worthy of consideration in this connection was the importance of examining our patients before operation for conditions quite different from those which caused the patient to present himself to us. The time to discover a lung lesion, Bright's disease, hyperthyroidism, venereal disease, or a kidney infection was before, not after, operation and such a discovery might be the means of saving the patient's life and the surgeon's reputation.

THE TECHNIC OF APPENDECTOMY

Referring to the various objections that can be made to the numerous incisions proposed for appendectomy, and especially to the Jalaguier and the Lennander incision, R. Danis described at the recent meeting of the Societe belge de chirurgie certain recent modifications of the McBurney incision, with a view to securing more solid and less visi-

ble cicatrization, and, at the same time, more constantly direct access to the appendix, no matter what its position may be. He discussed in detail the question of the direction and the localization of the skin incision.

The end of the appendix is located on a line drawn from the right iliac spine to the left public spine, at a point about 3 cm. external to the former. An incision made at the level of this line gives regular access to the cecum. Whether the meso-appendix is long or short, the cecum can easily be made to appear in the wound, and the appendix will always be in the field if its position is normal (laterocecal or retrocecal), the base appearing first, at the moment the head of the cecum is drawn up through the wound.

The author made the following remarks in connection with the location of the incision: The vertical incision comes in contact with a great many nerve fibers, for example, the ends of the lower dorsal nerves, which are directed obliquely downward and inward, and thus produces a large area of anesthesia between the cicatrix and the median line, which lasts for several months and causes the patient great discomfort. The more obliquely the incision is made, the less extended the area of anesthesia becomes. Danis gave an illustration of the good effects of rotating the incision by referring to a cardboard, which, when held perpendicularly to the rays of light, casts a broad shadow, but as it is held less and less perpendicularly the shadow grows smaller and smaller until it becomes a mere line. The suppression of the anesthetic shadow, that is to say, the gradual decrease of the zone of anesthesia, is the indication for the direction of the incision. In short, the author advises a very oblique incision, inclined toward the horizontal, and located much lower than the McBurney incision.

TREATMENT OF FRACTURES WITH BONE GRAFTS

Dauriac is enthusiastic over the fine results of immobilizing fractures with bone grafts cut to fit by Albee's technic with electricity. He has been treating fractures in this way since 1916, with constantly perfect outcome. The only metal for holding fractures in place that answers its purpose is Treve's aluminum alloy. The tissues seem to stand this metal without reaction, and he has found it useful in various ways. He is now having screws and a cable made of this alloy which he thinks promise well.

TRAUMATIC RUPTURE OF HEART WITHOUT FRACTURE OR EXTERNAL LESIONS.

While engaged in fire practice in the regimental lines a soldier was pulling the wheeled fire pump when, coming downhill, it ran away with him, and he was crushed between a stone wall and the cross-bar handle of the pulling shaft, which apparently caught him across the middle of the chest. He was seen to fall dead at once. Externally there was some congestion of the right eye, and a small cut and contusion on the right side of the forehead. No other contusions or lesions were found anywhere and no fractures or hemorrhages, though the saliva was tinged with blood, possibly from some undiscovered cut in the mouth. The base of the skull was not fractured; there was marked pachymeningitis along the superior longitudinal sinus. The abdomen was natural; the ribs were unfractured, but were very pliable, so that the chest could be com-

pressed easily. The lungs were natural. The pericardium was full of blood but undamaged. The heart was very small, being only about 3½ inches long and 3 inches broad. The valves and heart muscle were apparently natural, and there was no trace of aneurysm or old disease. In the wall of the right auricle, between the right coronary artery and the entry of the inferior vena cava, was a small rent measuring about three-fourths by one-half inches. Bilderbeck suggests as cause of this curious accident that at the moment of impact the man may have taken a deep inspiration, engorging the right auricle, which then burst on sudden compression through the costal wall by the cross bar of the shaft of the fire pump.

J. A. M. A.

LATE RESULTS OF ABDOMINAL OPERATIONS

T. R. Brown, Baltimore (*Journal A. M. A.*, Nov. 15, 1919), while noticing the advances made by physiologic research and improved surgical technic, mentions the later undesirable sequels from some surgical operations, and calls attention to the importance of the internist as guiding the surgeon in his work and diagnoses to avoid later complications. From his study of the subject for many years past, the author concludes that the surgeon has been too prone to believe in the success of surgery in some chronic abdominal cases and to consider his brilliant successes in acute conditions too highly as applied to the prognoses of the others. He is not likely, often, to be as cognizant of the later complications, as it is to the clinician that the patient makes his complaints. Some failures are to be ascribed to a wrong appreciation of the real underlying process, as notably in the cases of so-called chronic appendicitis met with in cases of marked visceroptosis of long standing. Here the operation is in the same category as that of fixation of the kidney or suspension of the uterus, of which the importance of the symptoms has been exaggerated. Many cases of failure, partial or complete, if the surgeon better understood the underlying pathologic condition could be changed to partial or complete success. A realization of the associated and often persistent functional disturbances is many times lacking. There is too great a tendency to have recourse to surgery, in Brown's opinion, in acute abdominal conditions, and far too little for persistence in medical, dietetic and physical therapy before coming to operation. Real success in this difficult field lies in better cooperation of the physician and surgeon, and the former should fully inform the surgeon in order to enable him to choose his procedure. On the other hand, it would be of the utmost value to the clinician in his future work to have the pathology of the disease fully demonstrated to him. The postoperative treatment should be with their cooperation, and the surgeon should be posted fully as to the subsequent development of each case.

CARDIAC MASSAGE AND RESUSCITATION

Cardiac massage is regarded by Norbury as a very important adjunct to the methods of resuscitation, applicable in cases of heart failure during surgical operations, as also in certain other conditions mentioned. With stoppage of the heart during the performance of an abdominal operation no time should be lost before starting subdiaphragmatic massage, and valuable time should not be wasted in the administration of

drugs. Artificial respiration and cardiac massage should be carried out simultaneously. In such circumstances a very few compressions will usually reestablish the heart beat. If heart massage be contemplated, it should be commenced certainly within five minutes of cardiac arrest. Norbury resorts to massage after giving other methods a trial of only two minutes. It may be necessary to continue rhythmical compression of the heart for several minutes before spontaneous contractions occur. In one temporarily successful case, the heart was massaged for thirty minutes before it could be made to beat; previous to this ordinary measures had been tried ineffectively for forty-five minutes. Norbury is convinced that the subdiaphragmatic route is undoubtedly the most satisfactory of the various methods of access to the heart for purposes of massage. Artificial respiration should be commenced as soon as normal breathing has ceased, and should be persevered with until spontaneous breathing is reestablished. In obstinate cases, Norbury says, means should be adopted for raising the blood pressure, either by pressure on the abdominal aorta, bandaging the extremities, or the application of Crile's pneumatic suit, if this be at hand. Intravenous infusion of weak solutions of epinephrin in physiologic sodium chlorid solution is also very efficacious, and this is especially applicable in cases where intravenous infusion with physiologic sodium chlorid solution has already been started before the heart stopped, when epinephrin can be added to the solution quickly. In cases where an intravenous infusion is not being already carried out this may be done by using the internal saphenous vein, since the arms will be wanted for performing artificial respiration, or, as an alternative, the common carotid artery may be exposed in the neck, and a weak solution of epinephrin in physiologic sodium chlorid solution be injected forcibly toward the heart by means of a syringe with a fine needle attached. Injection of epinephrin solution into the heart cavities or wall is liable to set up fibrillary twitchings, and is of no use as a means of restoring normal cardiac contractions.

Book Reviews

Geriatrics by Malford W. Thewlis, M. D., Associate Editor, Medical Review of Reviews, New York City. C. V. Mosby Co., St. Louis 1919, Price $3.00.

Be not discouraged gentle and unsophisticated practitioner at this "euphonious and high sounding" title "Geriatricts" it is but the consideration of an old friend (or enemy according to the point of view) with whom the world has been acquainted for cycles upon cycles of time, old age, of its conditions, disease and care.

We quote from the introduction by Dr. I. L. Nascher "Diseases in senility are pathologic conditions in a normally degenerating body; not diseases such as occur in maturity complicated by degenerations."

"The object of treatment of disease in senility is to restore the diseased organ or tissue to the state normal in senility; not to the state normal in maturity."

The introduction of, or the attempt to erect a new branch or specialty in medicine may at first thought seem to be a work of supererogation in the already "overspecialized science of medicine" but when we consider the matter more deeply the realization of the importance of the subject becomes very impressive and we can scarily fail to

concede the desirability of such a course. The reader of "Geriatries," cannot fail to find much food for thought and many invaluable suggestions within its covers.

A MANUAL OF OBSTETRICS

A Manual of Obstetrics, by John Cooke Hirst, M. D., Associate in Gynecology, University of Pennsylvania; Obstetrician and Gynecologist to the Philadelphia General Hospital. 12mo of 516 pages with 216 illustrations Philadelphia and London: W. B. Saunders Company, 1919. Cloth $3.00 net.
Philadelphia London

This book by the distinguished author is written as a companion to his well-known "Manual of Gynecology." It serves the use of the student and busy general practitioner whose time for reading is necessarily short.

Chapter XIX is wholly given to Obstetric operations, preparation for, technique and after-treatment of the same.

A large part of the work is taken up in considering the pathology and healment of post labor pathological conditions after the usual description of the management of normal labor and *puerperium.* It is a safe guide and a valuable addition for the library table.

THE HEALTH OFFICER

THE HEALTH OFFICER. By Frank Overton, M. D., D. P. H., Sanitary Supervisor, N. Y. State Dept. of Health and Willard J. Denno, M. D., D. P. H., Medical Director of the Standard Oil Company. Octavo of 512 pages with 51 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, $4.50 net.

Since the descent of the "Literary Deluge" many volumes have been written which cannot possibly have any excuse for existence and had much better be consigned to the floatsam and jetson on the "literary ocean;" but not so of the volume under consideration, as it not only has a "good excuse" but has filled a "long felt want"—has supplied a demand for a practical, comprehensive work covering very important matters pertaining to the comfort, health and lives of our population. Too often under our present system of selection the health officer is a creature of political "pull" without any consideration of fitness for the office. This book furnishes information of such a character as will to a great extent nullify a lack of knowledge or experience if its teachings are taken as a guide. It tells "what to do and how to do it" and gives reasons therefor. The author discusses in a logical manner our most important contagious and infectious diseases suggesting effective methods of management and measures for prevention. While not by any means an exhaustive work, a study of its contents will be of practical use to students and practitioners as well as health officers as it considers food sanitation and values, milk, water, supplies, ventilation, disposal of sewage and household wastes and destruction of vermin with all of which the profession at large is vitally concerned in its every day associations.

Come to Parkersburg in May

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER, } Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 11. HUNTINGTON, W. VA., MAY, 1920 Subscription $2.00 per Year
Single Copies 20 Cents

REVIEW OF HOSPITAL LEGISLATION AT THE LAST MEETING OF THE LEGISLATURE

William W. Golden, M. D.,
F. A. C. S.

Elkins, W. Va.

Read at the Meeting of the State Hospital Association at Clarksburg, May, 1919.

I am presenting this short paper at the request of our President, or rather at the President's command, for just as I was about to answer his letter of request stating that I could hardly find the time for such paper I received another letter from him stating that he had already placed me on the program and that the program was already in print.

There are three things in the Acts of the last Legislature which concern hospitals in particular. Two of these concern the Workmen's Compensation Law, and one is the matter of so-called hospital appropriations, or, more correctly, misappropriations.

As regards the amended compensation law. The maximum limit of expenditure for medical, surgical or hospital treatment of an injured employee has been raised to $300 in cases of exceptional severity, depending upon the opinion of the Compensation Commissioner. The other thing concerning hospitals is the elimination of the word "otherwise" from paragraph (d), section 27.

While these things on their face are improvements in the law, it does not follow that they will necessarily benefit the hospitals and physicians unless broadly interpreted. For instance, if the Commissioner should fail to promulgate a definite definition of what he will consider as an exceptionally severe injury to merit an expenditure above the common maximum of $150, so that the surgeons and hospitals would know exactly what to expect without special correspondence in the individual case, then the amended law will not be of much

benefit. It will inject an uncertainty in many cases as to whether to hold the patient responsible for the additional expenses and fees or to depend upon the Workmen's Compensation Fund. It is not always practical to keep close tab on the financial side of a case as it drags along so as to be in a position to take the matter up with the Commissioner far enough ahead to know what he will do when the $150 limit is exceeded.

At our last meeting the Commissioner's secretary tried to explain away many of our troubles with his office on account of that now notorious word "otherwise." This word has now been omitted, and, therefore, many of the experiences told at our last meeting need not happen again. However, on the 7th inst., I receive a letter from the Commissioner's office rejecting my claim and the hospital's claim in the case of a fractured tibia in a coal miner on the ground that this patient could have received free care and treatment at the Fairmont State Hospital. Now, it is possible that inasmuch as the injury in this case occurred last December, i. e., before our last Legislature amended the law, the Commissioner still deemed it his duty to treat it in accordance with his interpretation of the word "otherwise." Our experience with this case is puzzling nevertheless. For in the case of a fracture of the tibia in another miner working for the same company which occurred a few days later but still in the same month of December, the Commissioner paid the bills. The distance from where these injuries occurred to our hospital is about 14 miles without a change of cars. The distance from there to Fairmont, where the nearest state hospital is, is about 70 miles, and requires from four to five hours, and usually with a change of cars. As it happened, too, if the patient in question went to Fairmont, he would have to wait till the next day.

All of which goes to show that it isn't so much the law that we should be interested in as it is the matter of the administration of it. If wisely administered in its present amended form, it could be made highly satisfactory to all concerned. But when administered otherwise, it certainly means needless annoyance and wrong to the doctors and hospitals, and the industrial victim can hardly be said to gain thereby.

As to hospital appropriations. This piece of legislation is a puzzling one, and is open to serious criticisms. It is a question whether or not the state should embark on a policy of furnishing free hospital care at all, especially under the existing state laws which hold the individual counties to the duty of caring for their indigent citizens. Every dollar expended by the state under this appropriation with a hospital simply means a donation to some county by the state of this much at the expense of the general taxpayer. Is this right, and if it is, is it consistent, is it just that thirteen counties should have been selected to be the beneficiaries of this state aid largely at the expense of the remaining forty-two counties? Some of these counties have hospitals. Or, to put the same question in another way, what particular merit is there in the thirteen fortunate counties to have been selected for this special consideration? Wherein is the county of Summers more meritorious than the county of Upshur, or the counties of Marshall and Randolph than Mineral and Monongalia? It is equally puzzling if one is to assume that the discrimination was made upon the character of the hospi-

tals. The private, public and the semi-public are represented by both, those which were favored and those which were not. And surely the discrimination could not have been based upon the quality of the hospitals, for among those which were favored are to be found the very poorest makeshifts. I have in mind one which at least up to two or three weeks ago did not possess the simple things necessary for testing the presence or absence of albumin in the urine. And among those that were not favored are some which are equal to the best in the state. It is true that the appropriations made are generally speaking of very small consequence to the favored hospitals inasmuch as the money appropriated is not given to them outright but instead is contingent upon actual care given to the indigent at the rate, I am told, of $1.50 per day. Nevertheless, the principle of the whole thing is questionable and the basis upon which it was done is entirely wrong. Furthermore, at least one of the favored hospitals seems to utilize it as a sort of advertisement.

During the session of the last Legislature I received a letter from our worthy President stating that he is writing to all the hospitals in the state urging them to write to the finance committees of the Legislature to ask for an appropriation. He explained he suspected that a "log-rolling" process was in progress whereby certain few hospitals are going to be favored with an appropriation as they have been in the past, which he wanted to defeat and thought this could be accomplished by overwhelming the Legislature with requests from all hospitals. His intention was good but his method failed, in fact it made matters worse.

I believe I have said enough to convince you that the basis upon which the Legislature made the hospital appropriations is wholly wrong. As to the principle or policy of any appropriations by the state for such purposes, this, as I stated, is at least questionable. I am not sure in my own mind whether it is right or wrong. The matter resolves itself into the larger question of government by paternalism. There are certain features, however, which the Legislature could have incorporated in the hospital appropriations which could have gone a long ways to redeem this questionable policy. It should have placed the money in a lump sum at the disposal of the Board of Control with instructions to use it for the hospital care of the indigent regardless where they may happen to reside or where the hospitals are located, provided that such hospitals come up to a certain standard. Such an act would have accomplished several good things. First, it would have removed from the whole matter the present aspect of political favoritism. Second, it would have given the poor the opportunity to go to the nearest hospital or to the hospital of their choice. Third, it would have treated the taxpayer fairly. And, fourth, and as important as anything, it would have helped to eliminate the boarding house type of hospital with which this state is considerably afflicted.

I talked this matter over with the chairman of one of the finance committees of the last Legislature, and he admitted to me frankly that the Legislature has nothing to be proud of in the manner in which it disposed of the hospital appropriations. He expressed his belief that the next Legislature will right this wrong, provided we hospital people will take the trouble to fully dis-

cuss the matter with the members of that Legislature. It was his opinion that the last Legislature blundered for lack of sufficient information.

THE SIGNIFICANCE OF PELVIC DISORDERS IN THE GENERAL DIAGNOSTIC STUDY OF WOMEN*

EDWARD H. RICHARDSON, M. D., F. A. C. S.

Baltimore, Md.

Read at Annual Meeting West Virginia State Medical Association, May, 1919.

Mr. President and Members of the West Virginia State Medical Association:

Permit me to preface my remarks by an expression of my warm appreciation of the honor which you have conferred upon me through the invitation of your Secretary to participate in the scientific proceedings of this meeting.

A survey of present day tendencies in medical education, in hospital organization and in the therapeutic application of medicine and surgery, clearly indicates that we have entered upon a new clinical era in the history of our profession. Just as the ancient and honorable custom of consultations between practitioners of approximately equal rank and training became largely supplanted in our centers of population, at least, by a growing demand for the more efficient services of consultant specialists—men of wider experience and superior skill in a limited field—so, in turn, we are now witnessing another interesting and significant change in the method of clinical adaptation. The multiplication and development of medical and surgical specialties have progressed with such amazing rapidity and the resulting contributions to scientific knowledge have reached such staggering proportions that even the greatest minds among us find themselves hopelessly unable to grasp and comprehend them all. We are confronted, therefore, with the interesting fact that none of us is competent any longer to give the best professional advice to an individual patient, except within a relatively narrow clinical domain. The designations "general surgeon" and "general medical man" are today misnomers, for no such individuals exist, if we mean by those phrases one equally competent in all subdivisions of surgery or internal medicine, as the case may be. These changed conditions are being met by the profession in an altogether intelligent and satisfactory manner by the substitution of multiple for single consultations. It is becoming generally recognized now, both by the laity and the profession, that in all maladies of an obscure or even serious nature the services not of one or two but of a coterie of highly trained consultant specialists are required, if the individual patient is to obtain the best that modern medical science offers in diagnosis and therapy. This group idea is the logical and necessary evolutionary product from an age of intensive specialization, and it has come to stay.

It seems to me, therefore, fundamentally important that the profession should be fully informed regarding the significance of the disorders encountered in the various special domains, particu-

---

*From the Gynecological Department of the Johns Hopkins University and Hospital.

*From the fifty-second annual meeting of the West Virginia State Medical Association, Clarksburg, W. Va., May 21, 1919.

larly with reference to their disturbing influences upon the proper functioning of the organism as a whole, in order that wise judgment may be exercised in the matter of choosing consultants and rendering efficient service to the individual patient. To this end, it is my purpose in this communication to show that disorders of the pelvic organs in women are so prevalent nowadays and their pernicious influence upon the female organism as a whole is so real and so profound that a careful examination by a competent gynecologist cannot with impunity often be omitted from any general diagnostic study of a woman that purports to be reasonably thorough and complete. The time at my disposal, however, will permit me to discuss briefly only a few of the many groups of abnormalities encountered by the gynecologist which might be presented in support of my thesis.

Of the abnormalities of the lower genital tract commonly met with before puberty physicians should keep conspicuously in mind that of an adherent prepuce with an accumulation of incarcerated smegma closely packed about the clitoris. For let it be remembered that the clitoris is a highly sensitive organ composed of erectile tissue and that when such a structure is constantly subjected to the mechanical irritation just described a vicious circle of immeasurable significance from a neurological standpoint is set into operation. To what extent this condition may lead to erroneous diagnosis and lamentably harmful therapeutic effort three recent cases encountered in my practice will serve to illustrate.

All three patients belonged to families of wealth and high social position. One of these little girls, eleven years of age, had grown up from infancy annoyed and humiliated by the distressing habit of nightly bed-wetting. She had been perennially dieted, drugged, restricted with regard to fluid intake and aroused periodically during the night to void, all of which measures served only to foster a nervous, irritable, unattractive temperament and nearly made a nervous wreck of her mother. Examination disclosed an unusually redundant prepuce with a mass of incarcerated smegma. Circumcision terminated the nocturnal eneuresis overnight and, within a week, wrought a miracle in the temperaments of both child and mother. The other two cases were almost identical in their main features. Both were charming little girls of about ten years of age, whose homes and social environment left nothing to be desired. Contrary to appearances, however, each had been adjudged an intractable masturbator. In each instance the advice of a coterie of the most eminent pediatricians, neurologists and internists of this country had been successively sought and a formidable list of polypharmacy, dietary regimes, rest cures, diversions by way of trips to fashionable health and pleasure resorts under the constant care of professional nurses, together with disciplinary educational systems, had been faithfully tried for months. The havoc thus wrought, both temperamentally and nervously, as well as physically, was only too apparent to the experienced observer, while the concern, gloom and humiliation of their parents were indeed pathetic. A simple circumcision in each case, together with the removal of the mass of incarcerated smegma packed about the clitoris, banished forever a heavy cloud from the lives and homes

of these children. The diagnosis of habitual self-abuse was thus immediately disproved and, more important still, their nervous systems were relieved of a severe and constant strain that had already caused marked functional derangement.

One of the commonest groups of pelvic disorders responsible for remotely harmful influences of sufficient severity to seriously discount the efficiency of a woman, through psycho-neurotic and functional disturbances, is that embracing the various degrees of mechanical injury incident to childbirth. For a number of years I have been convinced and have been teaching medical students that permanent damage to the various anatomical structures composing and adjacent to the birth canal of sufficient degree to later produce a sequence of symptoms of vital significance to the health and well-being of the woman, is not the exception but the rule even in normal deliveries. I want to state emphatically and unequivocally as my deliberate judgment that it is not mechanically possible for a normal size, full-term child to pass through the birth canal of a normally developed woman—no matter by how experienced an obstetrician or under however ideal conditions the labor may be conducted—without leaving permanent injury of sufficient degree as not only to be later readily demonstrable but also, in most instances, to be directly responsible for a group of symptoms which materially discount the physical efficiency of the woman. I am fully aware that such radical teaching will at present receive few if any supporters, especially when I make haste to add that I have had a very meager obstetrical experience. For no fallacy is more firmly fixed in the minds both of the profession and the laity than that obstetrical injuries constitute one of the unpardonable sins and brand the attending physician as incompetent; as witness, on the one hand, the resentment depicted in the face of a woman when she is informed, after a pelvic examination, that she was injured in childbirth, or, on the other, the occasional echo from bygone days still heard at the meetings of some county medical societies under the modest caption of "One Thousand Deliveries Without a Tear!" The permanent damage to which I refer has not to do with the superficial lacerations of the vaginal mucosa, the hymen, the fourchette or even the sphincter vaginae and minor perineal muscles. These are usually repaired with scrupulous care at the time of delivery.

But what I am trying now to emphasize is that the really significant injuries include stretching of the supporting ligaments of the uterus, lacerations of the cervix, and particularly submucous stretching and tearing of the highly important subvesical fascia, and of the levator muscle fibers together with their encasing fascial layers. The extent of the trauma to these structures is not always apparent, even to an experienced observer, at the end of the puerperium, since weeks or months may elapse before the atrophy which inevitably follows is complete. Later on, especially in multipara and as the menopause age is approached, there develops the familiar clinical syndrome indicative of a relaxed outlet with varying degrees of descensus of the pelvic viscera, and then follows the associated picture of a nervously bankrupt woman whose life is made miserable, whose beauty and attractiveness are gone and whose efficiency is almost nil by reason of a multitude of disordered organic functions.

I cannot emphasize too strongly that a thorough pelvic examination should occupy a prominent place in the diagnostic study of every parous woman, no matter how remote from the pelvic domain her complaints may appear to be.

During recent years the intensive study of the glands of internal secretion has given us, among other things, a much broader and more comprehensive idea of the functions of the ovaries. Formerly these organs engaged our attention chiefly with reference to their surgical removal for reasons both real and fanciful, but, in the light of recent investigations, we must now recognize that they constitute one of the most important units of the entire endocrine system, since they not only govern the functions of menstruation and reproduction but in addition exercise a profound influence far afield from the genital domain. The perfectly co-ordinated cyclic phenomena culminating each twenty-eight days in the fully developed corpus luteum in the ovary and the menstrual flow from the uterine mucosa furnish one of the most beautifully adjusted physiological mechanisms of the entire human organism. Furthermore, it serves to remind us of the fact that the ovaries are complex glandular organs which are constantly busy elaborating one or more specific internal secretions of a highly important character. We long have known that normal development of the whole group of secondary sex characteristics occurring at puberty are dependent upon normally functioning ovaries. So, too, we are familiar with the temporary enlargement of the thyroid gland commonly observed at puberty and during pregnancy; with the profound and varied disturbances associated with the menopause; and with the developmental and functional abnormalities of the pelvic organs associated with primary disease of the thyroid gland or of the pituitary gland. All of this indicates, of course, a very intimate functional interrelationship between these different units of the endocrine system, and emphasizes again the importance of determining, through a careful pelvic examination, the condition of the ovaries as a part of the general diagnostic study of a woman.

One of the commonest pelvic symptoms encountered is that of abnormal uterine bleeding, but its significance is certainly not appreciated by the profession. From the best available statistics it is probable that at least ten to twelve thousand women die annually in the United States alone from cancer of the uterus. All of us know that the only cure for this disease is its early and complete excision while it is still localized. Some years ago an analysis of the uterine cancer cases treated in the gynecological department of the Johns Hopkins Hospital showed that in over sixty per cent there was a history of neglected uterine bleeding which had been going on for over six months, and during the past thirteen years, covering the period of my active participation in the work of this clinic, I am sorry to say that I have observed no improvement in this direction. Now, when we consider that three-fourths of the patients afflicted with cancer of the cervix die within two years, and one-third of them within one year from the initial symptom, the importance of early diagnosis and prompt surgical treatment becomes apparent. This distressing situation with reference to uterine cancer is to be attributed mainly, I believe, to two erroneous ideas which are still firmly fixed in the minds of both the profession and the laity; one is that

cancer does not occur until after thirty, and the other is that any kind of abnormal uterine bleeding is to be expected at the menopause age. Heaven only knows how many women have died from uterine cancer as a result of these two fallacies. I have seen inoperable cancer of the cervix at every period of life from the early twenties to extreme old age. Let me emphasize, therefore, that the age limit in this disease extends from puberty to death. Unfortunately, pain is not a symptom of cancer of the uterus—textbooks to the contrary notwithstanding; rather it is to be considered the first sign of death, for uncomplicated cancer of the uterus produces not a twinge of pain until it has extended beyond the uterus and become incurable. There is but one symptom to remember in connection with this disease and that is slight abnormal uterine bleeding. That is all. Not a hemorrhage, no sudden gush of blood, nor even a continuous seepage, but a slight staining from the little oozing that would follow the breaking down of a few epithelial cells. This is the first and earliest sign of uterine cancer. Does the significance of this fact strike you with its full force? Would that I could herald the message abroad throughout the length and breadth of our land in such stentorian tones that every doctor and every woman within its bounds would realize and respond intelligently to the unalterable fact that *every case of abnormal uterine bleeding, however slight and at whatever age, means cancer until proven otherwise through an exhaustive examination by a competent physician!* But I have said enough to emphasize the importance of a pelvic examination as a part of the diagnostic study of every woman presenting this symptom.

One of the epoch-making advances in medical science has been the demonstration within recent years of the far-reaching significance from the standpoint of pathological physiology of concealed foci of infection within the human body. The pitiless spotlight of scientific investigation has been relentlessly focused upon infected teeth, tonsils, paranasal sinuses, gall bladders and appendices until even the most sceptical among us cannot possibly longer entertain any doubt as to their causal relationship to a group of diseases formerly imperfectly understood and unsatisfactorily treated. By the same process we are beginning to realize now that pelvic infections belong in the same iniquitous category. There may be nothing particularly startling in the isolated fact that tuberculous peritonitis in women more frequently starts from foci in the fallopian tubes than from any other anatomical site; neither are we often acutely sensible of the prolonged morbidity and remote havoc wrought by puerperal sepsis following imperfect obstetrical technique and the ever multiplying and nefarious acts of criminal abortionists; while so accustomed had we become to hearing of the prevalence of gonorrhea and syphilis that it required nothing less than a world war and the amazing disclosures of the medical examining boards of our army and navy to arouse us from our professional lethargy, and to bring home to us the undeniable fact that, through these venereal diseases, the very life of our nation is seriously threatened and that their eradication constitutes one of the greatest public health problems of all ages. Consider, then, if you please, the collective incidence today of tuberculous, of puerperal and of venereal infections of the female reproductive organs,

reflect upon their unparalelled significance as foci of infection not only to the individual woman but also to her pitiable offspring and to the public health, and nothing more need be said, I am sure, to stress the importance of a specific search for these diseases as an essential part of the diagnostic study of every woman.

So intimately bound up with the diseases of the female genital system are the surgical disorders of the urinary tract that the two, of course, are inseparable. But, thanks to modern urological methods and especially to the Kelly open-air method of cystoscopy, a complete and accurate inspection of the urethra and bladder, an investigation of the ureters particularly for calculus and for stricture, capacity and contour details of the renal pelves, as well as a comparative study bacteriologically, chemically and functionally of the two kidneys, may all now be accomplished with the utmost care at a single brief examination. Bladder symptoms are almost as common among women as is backache. Ureteral strictures in women we now know to be a common disorder and responsible for many useless laparotomies for supposed disease of the ovaries, appendix or gall bladder. Urethritis, cystitis, bladder ulcers and neoplasms, pyelitis, calculus and tuberculosis are always with us. So that a cystoscopic study is often the most illuminating part of a pelvic examination and must be frequently made use of in the general diagnostic study of women.

The time at my disposal does not permit me to discuss the relationship to the female organism as a whole of the benign tumors of the uterus; of the varied and interesting neoplasms of the ovaries; of the abnormalities of pregnancy, including the ectopic cases; of the problems of sterility and sexual inequalities; of the almost constant association of pelvic diseases with surgical abnormalities of the abdominal viscera, including the appendix, the intestines, the stomach, the gall bladder and the rest. But if I have succeeded in focusing your attention upon the prevalence, the scope and the significance of pelvic disorders, upon their injurious effects on the health of the individual and upon the attention they merit in every thorough diagnostic study made of a woman, the purpose of my communication has been achieved.

1200 N. Charles St., Baltimore, Md.

REPORT OF A CASE OF ENCEPHALITIS LETHARGICA

DR. W. H. ST. CLAIR

Bluefield, W. Va.

The case of encephalitis lethargica, a report of which follows, occurred in my own practice a few weeks ago about the time when the first cases of influenza were appearing here in the present epidemic.

A young man, aged 19, with a family and past history of no significance except that of a syphilitic infection one year ago, which was treated with salvarsan and mercury and iodide, came into my office on January 23 complaining of feeling bad and "seeing double." The case was casually disposed of. The next day he reported at Dr. Chas. St. Clair's office on account of his double vision. Some mental dullness was noted. His discs were normal. There was ptosis of the lids of both eyes; the muscles giving rise to his double vision were not singled out. He went to his

home and to bed. I saw him at night. He had a temperature of 102.5 and was lying in bed with his eyes closed, apparently in a stupor from which he was aroused easily. His pulse was in keeping with his temperature. There were some muscular twitchings about his face. He still complained of his double vision. His temperature continued to range between 101 and 103. The muscular twitchings extended to his arms. His lethargy became more marked, and for two or three days this was interrupted by periods of mild delirium. We thought his neck muscles were slightly stiff, but he never had a Koenig. His urine showed a ring of albumen and numerous hyaline casts. The blood showed a moderate leucocytosis—15,000 white cells, with a corresponding increase in polys. The blood Wassermann was negative. The spinal fluid was under moderate pressure and was clear. The cell count of the fluid was 185, positive for globulin and sugar, negative for culture, Wassermann positive. About the fifth day his condition was decidedly bad, the lethargy amounted to coma from which he could not be aroused and urine and feces were passed involuntarily. On January 29, the eighth day of symptoms, his temperature took a sharp curve upward to 108, when he died.

The interest attached to a report of a case of encephalitis lethargica is its comparative rarity and its coincidence with the pandemics of influenza within the past 30 years. The so-called "epidemic encephalitis" reported in 1890 no doubt owed its origin to and was actually a part of the influenza pandemic which started the previous year and lasted in an attenuated form up to and through 1893. Under more favorable conditions for investigation, this unusual disease might have formed the conspicuous chapter in medicine which has only been written recently. With the concentration of troops in the great world war, an ideal opportunity, under military arrangements, was furnished for the study of the disease when another pandemic of influenza appeared in 1917. Cases were reported in Europe coincident with the appearance of influenza, and similar cases were reported in this country in 1918. Since then the literature has contained a number of series of cases, the total in all comparatively small, but of a sufficient number now to establish clearly the disease as a definite entity. The condition has been popularized as "sleeping sickness." Its coincidence with influenza adds weight to the suggestion that the disease really might be called cerebral influenza.

Clinically encephalitis lethargica is characterized by fever of an irregular type, marked lethargy, and a cranial nerve paralysis with a special tendency to be ocular. In an excellent summary, with his personal experience included, Vest, of Huntington, reports some interesting statistics. In one series 92 per cent had fever, 72 per cent had lethargy to a notable extent, and two-thirds of the cases complained of double vision. Occasionally the vision is noted as blurred. Drooping of the lids is stated to be common. Muscular twitchings are the rule. The patient is usually aroused easily from his lethargy, and occasionally the lethargy is interrupted by periods of delirium. A number of the cases simulate closely a type of meningitis. The blood picture shows nothing unusual except a slight leucocytosis. The spinal fluid is uniformly clear, with a cell-count reported from normal to 85. The reported cases usu-

ally show a negative Wassermann for both blood and spinal fluid. Cases of the disease recovering show a persistence of the lethargy and palsy after the fever disappears. Weakness may last a month or so. The mortality is not determined. One series fixes it at 24 per cent.

The case seen in my own practice was clinically in every important detail the syndrome of "sleeping sickness." The one unusual feature was a known history of syphilis, negative blood, but positive spinal fluid, Wassermann, and a cell count of the spinal fluid higher than the average. What bearing the syphilitic infection has on this case, if any, offers some specualtion for interesting discussion.

ACUTE INTESTINAL OBSTRUCTION

G. A. HENDON, M. D.

Louisville, Ky.

Read Before West Virginia State Medical Association at Clarksburg, 1919.

Acute intestinal obstruction has the highest mortality rate that is associated with any other abdominal crisis. The rate has been stated to be as high as fifty per cent. Moynihan makes the statement that ten per cent is all the legitimate mortality which ought to be allowed. That leaves, therefore, forty per cent of mortality that is to be charged against the medical and surgical fraternity. This fact has led me to choose the present subject for my address upon this occasion. I feel that it is only necessary to call the attention of medical men to this unpleasant condition of affairs to arouse their interest and enlist their attention in an effort to improve the present status of this most melancholy physical disaster. In considering the subject we should always keep in mind the fact that there are three currents involved in a blocking of the alimentary canal; the fecal current, the vascular current and the nerve current. Successively first one and then the other and ultimately all three of these currents become blocked in a case of complete obstruction. The violence of the onset depends upon which one of these currents are primarily interfered with. If it is the fecal current the symptoms of the onset are relatively mild. If it is the vascular current the symptoms of the onset are absolutely violent. Blocking of the nerve current, being the result of sepsis, is always secondary to a focus of infection and is dependent for its degree of intensity upon the kind and character of lesion which produced the original trouble.

The methods by which obstruction may occur may be classified as obturation, strangulation and enervation. Obturation is that form in which the intestinal lumen becomes occluded by enterolith or a neoplasm. Strangulation is the type of obstruction which occurs as the result of some form of constriction. This constriction may be produced by a twist or a band or a protrusion of a segment of the bowel through some unnatural opening. There is another form of obstruction which seems to combine all of the essential characteristics of those already mentioned and which is, therefore, somewhat difficult to classify. This is intussusception. We are particularly interested in the diagnosis of intestinal obstruction because, as Moynihan says, "Any man who op-

erates on twenty cases of intestinal obstruction will find that at least fifteen have come too late." Even those that recover will suffer the consequences of delayed relief. I think that the one thing which confuses and makes diagnosis most difficult is the administration of purgatives and the great harm which purgatives result in grows out of the time that is wasted in waiting to see whether a purgative will act or not. For instance a large dose of castor oil is administered and the attendant may wait six or eight hours to see whether it will produce a movement of the bowels. Quite frequently the dose is vomited shortly after it is ingested and more time is wasted in an endeavor to administer a dose that is retained. After it has become apparent that castor oil is not going to be efficacious then the addition of croton oil is advised and tried or the virtue of some other purgative is relied upon and this way usually about twenty-four hours of precious time is consumed. The attention is next turned to the administration of the different forms of enemas and waiting to see what results they will accomplish. Upon these two measures alone as much as forty-eight hours are thrown away; therefore, I should say that if intestinal obstruction is suspected every kind of purgative is contra-indicated. No case of intestinal obstruction was ever relieved or ever will be relieved by the administration of purgatives.

I can conscientiously submit the statement that any abdominal crisis that is characterized by intense pain and vomiting in which diarrhea is *not* present is due to a blocking of one of the three currents already defined. If it is due to an obturation or a strangulation operation for the direct relief of either is emphatically demanded. If it is due to an enervation operation for the removal or control of the septic source which brings about the enervation is just as emphatically in demand. The man who waits for a perfect grouping of symptoms before reaching a decision is going to continue to lose fifty per cent of his cases. It is a fact that there never was a case of obstruction that could not at some time during its progress have been relieved in a very safe and a very simple manner. Any case of obstruction of the bowels can and should be diagnosed and operated upon within twenty-four hours from its inception. I have in my records four cases of strangulated femoral hernia which had been treated from three to seven days upon the basis of a diagnosis of biliousness. It should be borne in mind that abdominal distention is rather a late symptom in intestinal obstruction and it only appears when the abdominal muscles, by reason of the depleting effects of the absorbed toxins having lost their tone, give way to the pressure within the abdominal cavity. Hence I never take into consideration the fact that abdominal distention may be a symptom.

The correct interpretation of constipation is a matter of great importance and I take the ground that in an abdominal crisis if there is not a profuse diarrhea constipation prevails, notwithstanding the fact that there may have been an action of the bowels since the onset of symptoms. Neither should the results of enemas be misconstrued. The passage of a moderate amount of gas or feces in response to an enema is not to be interpreted as meaning that the alimentary canal is patent and no obstruction exists. The colon can always be counted on for the production of a small amount of gas and feces under adequate stimulation. It becomes neces-

sary, therefore, if we are to improve our statistics, to learn that it means death to the patient to wait for the development and appearance of what we were formerly taught to be the symptoms of intestinal obstruction. Not only a revised study of the symptomatology but an absolutely new set of symptoms must be recognized. Therefore, I am convinced that abdominal pain accompanied by nausea and the absence of diarrhea is sufficient ground upon which to justify a diagnosis of obstruction. There are some characteristics about the pain of obstruction that distinguishes it from pain from other causes. The pain from obstruction is distinctly paroxysmal and is synchronous with each successive peristaltic wave of the bowel. Between waves there is almost a complete cessation and after the muscular wall of the intestine has been exhausted by over-exertion and toxic saturation the pain may cease entirely. There is also something very distinctive about the characteristics of the vomiting of intestinal obstruction—the chief of which is the fact that it is marked more by its persistency than by its violence. After the food contents of the stomach have been regurgitated the vomiting assumes a low grade, irresistible, muscular effort that is continuous and is almost barren of results until late in the disease when the morbid secretions of the intestine are poured back into the stomach in large quantities when the vomiting becomes provisional and excessive.

Treatment should be applied according to the time that has elapsed between the onset of the symptoms and the hour of the operation and the corresponding condition of the patient. Let it be well remembered that as many patients have lost their lives as the result of too much surgery as have died as the result of tardy diagnosis. In operating upon cases of obstruction speed and delicacy of manipulation should be the main impulses in the surgeon's mind. It should also be well remembered that there is no field in the realm of surgery where fractional operations are of as much importance and as productive of good results as in obstruction of the bowel. The main object in the operation after forty-eight hours of obstruction is to drain the intestinal canal. If the constriction or obturation is relieved and the bowel left undrained and in its distended state the patient is as sure to die as if no operation had been performed. Patients who are the victims of obstruction die by reason of the absorption of toxines. These toxines, according to Draper, are endocrine in source when the obstruction occurs above the lower extremity of the jejunum and bacterial in origin when they occur lower down. But whatever the source may be it is a toxine that kills and to save the patient's life the most essential thing in connection with the operation is the drainage of the intestinal canal. Therefore, as soon as the obstruction is located drainage should be the first consideration. After the abdomen is opened if in the second period the first step should be to open the intestine above the site of the obstruction and empty it of its contents before the removal or release of constriction is attempted.

No unnecessary time should be sacrificed searching for the site of obstruction, but the first loop of the intestine that presents should be opened outside of the abdominal cavity and drained of its contents as thoroughly as possible and the patient preserved thereby for a future operation. The most favorable site for incision is in the median

line below the umbilicus. In searching for the obstruction it should be borne in mind that it is almost invariably found in the pelvis or at the familiar sites of hernia. If the necessity is felt to trace the bowel to the locality of the obstruction it is well to bear in mind that the collapsed portion of the bowel is much more readily followed than the distended portion and the *collapsed portion is always to be found lying in the pelvis.* After the bowel has been drained by the introduction of a Paul tube, the next question to be decided is what is the best operation to do. With the solution of this question there comes into play that indefinable and intangible something called "surgical judgment," that cannot be transmitted either by example or by precept, but is an expression of the composite of each individual man's study and experience. Generally speaking, the surgical procedures run in grades from enterostomy to the simple release of the constriction. In the very worst cases we do an enterostomy. In those that are not the very worst, but are almost as bad as the worst, we do the Mickulizc operation, and those of a still lower degree of severity we do a resection with a side to side, never end to end, anastomosis. In the earliest cases simply release the constriction. A general rule which will apply in the majority of instances is as follows: Cases operated upon between the twenty-fourth and the forty-eighth hour admit of simple release of the constricting agent. Such cases will drain automatically from the distended into the collapsed portion of the bowel. This obtains unless there has been complete interruption of the vascular supply as well as the fecal current from the very beginning. The cases past forty-eight hours, between forty-eight and seventy-two, will require drainage by incision into the distended bowel and resection of the strangulated segment with either side to side anastomosis or the Mickulizc operation. If the patient is within middle life and relatively vigorous the resection with a side to side anastomosis can be performed. If the patient is past middle age they will not admit of the extra time and shock involved in complete anastomosis. Therefore, the Mickulizc operation is the one which offers the greatest degree of safety. After seventy-two hours enterostomy should be performed after the method of J. W. Long with the prospect of a complete operation being accomplished after the vitality of the patient has been restored by drainage and nutrition. It is a matter of uniform observation with me that when the strangulated segment of the bowel is outside of the abdominal cavity that the symptoms are not nearly so violent or depression so great as when the strangulation occurs inside of the cavity. I have recently operated on a group of five cases of strangulated femoral hernial, resecting three. The period of strangulation varying from three to seven days, and all five cases made good recoveries. If the strangulation had occurred inside the cavity I do not believe that either one of these cases would have survived a resection at the primary operation but would have been subjected to the procedures as detailed above. In one of these cases a segment of the intestine had been strangulated for three days. There was a complete interruption of the fecal current and almost complete interruption of the vascular current. The vitality of the bowel was restored by the application of a warm saline solution and returned into the cavity. This was seventy-two hours of inclusion accompa-

nied by all of the clinical signs of intestinal obstruction. The age of the patient will give one a very good idea of the location and the nature of the obstruction.

If the patient is advanced in life beyond sixty, obstruction is nearly always due to an enterolith located in the lower twelve inches of the ileum or a torsion of the mesentery of the sigmoid. If the patient is in adult life the obstruction is most likely to be the result of a mesenteric band or an obliterated appendix or Meckel's diverticulum. If the patient is in the adolescent period the obstruction is most likely to be due to a diverticulum. The obstruction of the bowels in infants is almost invariably produced by an intussusception. This form of obstruction presents certain difficulties of diagnosis because it is accompanied by straining and an expulsion of bloody mucus stools. On that account it is often confused with summer diarrhea. However, this form of obstruction is the only one that consistently presents the existence of an early definable tumor. This tumor occupies the right iliac region and is of the proverbial sausage-shaped outline. I do not think that this form of obstruction will ever admit of a primary resection because of the low resisting power of the child and the extremely exhausting effects of the disease and the usually late diagnosis. Neither do I think it wise or safe to attempt a reduction of the invaginated bowel on account of its extreme liability to recurrence. I think that the operation of choice in a case of this kind is an ileo-sigmoidostomy, although I must confess that I never have tried this procedure but will at the next opportunity. The mortality of intussusception is much higher than that of any other forms of obstruction and I think this is due to efforts at reduction and attempts at resection.

I would like to say a few words with respect to tradynamic ileus. I do not think any efforts ought ever be directed toward the removal of this condition per se. As already stated this is a provisional act of nature and intended by her to relax an overtaxed bowel and secure rest by suspending its function. Therefore, I do not believe that the administration of drugs such as those which are intended to stimulate muscular contraction of the intestinal wall are indicated; on the contrary I regard them as being decidedly contra-indicated just as much as I regard as contra-indicated a passive movement of an acutely inflamed joint or flooding a diseased eye with light. As soon as the cause of ileus is modified or removed the bowel tone is quickly restored, and its functions promptly reestablished.

The after-treatment of all cases operated on for obstruction should be directed toward securing the comfort of the patient and withholding all forms of nutrition within the limits of safety. My practice has been to place the patient in the Fowler position, instituting proctoclysis and allowing a sufficient amount of morphine hypodermatically administered to control pain. I am also in the habit of allowing the patients all the water, either hot or cold, that they are able to hold. The one thing above all others demanding special attention after operation is acute dilatation of the stomach. For this condition frequent lavage is found to offer complete relief. It should be resorted to early in the action and not deferred as a last hope. The indication for lavage should be the appearance of a slight brownish or greenish stain in the regurgitations

of the patient. The stomach ought never to be allowed to become distended enough to present the familiar rounded, convex contour between the arch of the ribs. The number of washings should be in proportion to the accumulation in the stomach as indicated by the regurgitation already referred to. Purgative should be studiously avoided and have no place in the after-treatment. If relief has been obtained by the operation the bowels will move voluntarily between the third and fifth days and cannot be made to move any earlier by the administration of purgatives. But great damage can be done by the irritating effects of drugs administrated with the idea of producing a bowel movement. By following the plan herein described I have been privileged to operate upon twelve consecutive cases without a death.

THE TUBERCULOSIS SITUATION IN WEST VIRGINIA

By HARRIETT B. JONES, M. D.,
Secretary W. Va. Tuberculosis League.

Glendale, W. Va.

Read at West Virginia Medical Association, May, 1919.

Having no vital statistics in West Virginia, it is impossible to estimate the number of tuberculosis cases that exist in our state. We cannot even get at the exact number of deaths, so as to average the number of living cases, but it has been found by those interested that there is not a locality where there are not one or more cases. I have gone into places and been told by doctors that there was not a case in their locality, but before I left I would find veritable hotbeds of infection. I have been in hotels where the rooms were occupied by tuberculosis cases and no effort whatever made to clean up before the room would be occupied by someone else.

In the rural districts there is more tuberculosis to the number of population than in towns and cities. Country people as a rule are afraid of fresh air and country children cannot compare with town and city children physically. I have observed this for years and it was also proven by our draft boards. Thirty-eight per cent of American men between the ages of 21 and 31 years of age were rejected as physically unfit and the majority of these men were from the country. Sixty per cent of this physical unfitness is preventable.

I have the names of 618 men rejected with tuberculosis and 269 soldiers returned with tuberculosis, making a total of 887 men between the ages of 21 and 31 with tuberculosis, that we actually know have the disease. Think of the numbers younger and older we do not know, and the numbers of children and others infected by these men, our tuberculosis cases would run up to an appalling total.

What has been done and is being done to help this situation, and what are we going to do?

Because of lack of time I can tell but little of what is being done by local people in different localities. I can but touch upon the things that have been done.

In May, 1908, the Kanawha Co. Anti-Tuberculosis League was formed through the efforts of Mrs. Malcolm Jackson, which laid a foundation for the splendid work done by that league ever since. While she lived, though in

very poor health for years, she did what she could and aroused an interest that still exists. She was also the leading spirit in founding Hill Crest Camp at Charleston and a very comfortable little cottage has been recently added to the other buildings, in her memory. The worker dies but the work goes on.

In October, 1908, in Parkersburg, the State League was organized and though the work has been done chiefly by persons who have given their services, there has been considerable work accomplished.

There are but few leagues in the state as it is found advisable to have committees from existing organizations rather than to multiply organizations, except in larger places, so the work has been done in twenty localities by committees from women's clubs, W. C. T. U. and individuals. Some of the leagues have been merged into the public health associations. In 1909 and 1910 tuberculosis nurses and dispensaries were secured for Charleston and Wheeling.

There is no question but that the Anti-Tuberculosis League was the first agency to do any public health work and out of its feeble efforts has grown a large number of public health nurses. One county where there was not a nurse when the tuberculosis work was done there, has no less than five paid by coal operators. That is what follows where nurses are sent.

We have a very recent example. In January we sent a nurse into one county and she has done such splendid work that they want to borrow her for six months and eventually have a county nurse. Our field worker has been doing splendid work in that same county with stereopticon exhibits and talks, and two coal companies have sent a letter of appreciation of the work done by these two women. Twenty-eight meetings were held with an attendance of over 4,000 persons.

Another nurse has been doing work in five counties where no work has ever been done. She has talked in every school in one county, formed leagues, hunted up tuberculosis cases, sent some to the sanitarium and aroused sentiment from which we hope much good will come.

The first public health lectures given were by those interested in tubrculosis.

In 1915-16 talks were given in 29 teachers' institutes in as many counties. Teachers have been found teaching, with tuberculosis, infecting their pupils. Do you not think a doctor is responsible to allow such a thing to continue to exist? You may feel sorry for the teacher, but eventually that teacher will die and some of the pupils she has infected, and you are responsible for several lives. Children have also been found in schools with tuberculosis and some of our workers have had them taken out. The child should not be there for his own sake and for the sake of others.

The sentiment against the common drinking cup has been growing, but it is very surprising at some things we find. I was taken by a doctor to a school of eight rooms. On the steps stood a bucket. I said, "Do they use buckets here for drinking water?" He said, "I do not know." I talked in a room where a bucket stood near me without a dipper. The teacher with great pride said, "My children have individual cups," I said, "How do they get the water out of the bucket?" She said, "Oh, they just dip it out with

their cups." Incidentally dipping their fingers too. They just fell short of the real thing.

An effort has been made to locate the rejected men and soldiers with tuberculosis, but on account of no addresses or inaccurate addresses we have not met with marked success. Wherever found, literature and instructions have been given and the patient urged to go to the sanitarium if an incipient case. These cases can only be found by county nurses.

As soon as it was found there would be no room for them at the sanitarium a plea was made before the Council of Defense, who responded most generously by appropriating $10,000 for buildings for soliders at the sanitarium at Terra Alta.

The tuberculosis exhibit was collected by the Kanawha Co. League and was first shown in Charleston, then sent to Wheeling where for five weeks it was seen by thousands of people. During that time the physicians gave talks on tuberculosis nearly every night to crowded houses. I remember the first night it was thought the large parlor would hold all the audience, but long before the time of meeting it was evident a large room must be obtained, and the audience was led to the Board of Trade audience room which was filled to overflowing. After that the meetings were held in churches. The Ohio Co. League was then organized. The exhibit was then sent out into the state for a year, staying in one place a week or two. In 1913 and 1914 the exhibit was sent through the state in a car, over nearly every railroad in the state. The Legislature appropriated money for this purpose.

In 1916 the Modern Health Crusade was started in the schools. Literature was sent to every teacher in 16 counties, for each pupil, and in 1919 to 31 counties. Many teachers became interested. Hereafter, we think a better plan will be to have our field worker visit the schools, distribute literature, and arouse in the children a desire to become Health Crusaders. Not a single school she has visited has failed to respond.

The Modern Health Crusade is a health movement for children between the ages of six and sixteen. There is a chore record with eleven chores which the children are to do every day in the week. Those keeping 75 per cent of the chores for two weeks win an Enrollment Certificate. Five weeks wins a Squire's button, ten weeks a silver and fifteen weeks a gold pin. By that time the child has acquired the habit of keeping some excellent health rules which will have an influence on his future physical life and make him more fit to battle with the world. Incidentally, his parents learn a great deal of how to keep a child well and healthy. Altogether, it is one of the best movements for the conservation of the health of children ever started.

The children are very enthusiastic and there are now about 40,000 enrolled. In one town 1,500 gold pins were won. If we can keep the children healthy we shall have less tuberculosis. One teacher wrote that they were doing a land office business in tooth brushes in his town.

At first, while the work was small the league financed the whole thing, but the expense has become too great. This year a number of boards of education and Junior Red Cross Leagues have borne the expense of their schools.

County boys and girls' agricultural agents can do good work if they will, and one agent deserves especial men-

tion, Mr. Jesse Simmons of Pendelton Co., the way he has lined up his boys and girls who have kept the chores and won all the insignia.

The great difficulty is to reach the rural districts while schools are in session. We can hope for little from indifferent teachers, but some are splendid. One man in a most inaccessible point had every pupil an M. H. C. and on the last day of school I was able to be present, and such a display of badges you never saw, for every child had won every one and such tidy children and clean school house was a delight to see.

A child physically unfit has no better chance of fighting the battle of life than men physically unfit can become soldiers.

Let us conserve the health of the children so that the next fifteen or twenty years will tell a different story.

It was soon evident that sanitariums were needed if effectual work was to be done and after four years of work through two legislatures, a bill was passed without a dissenting vote in either house.

In 1913 the State Sanitarium was opened with 60 beds. It is located at Terra Alta, with an elevation of 3,000 feet, pure air and water and cannot be excelled for beauty of location. Its station is Hopemont on the main line of the B. & O. R. R. A number of incipient cases have recovered and are doing good work in the world. There is great hope for the incipient case. Send him soon. The sanitarium is most efficiently managed under Dr. E. E. Clovis. What is needed is a field nurse to follow up the cases after leaving the sanitarium. Do not send advanced cases. It is an injustice to your patient and to the sanitarium.

About the same time the Wheeling people built View Point and Hill Crest Camp was opened at Charleston.

In 1917 the legislature appropriated money for a sanitarium for negroes. It is in the mountains at Denmar, Pocahontas Co. The superintendent is Dr. C. A. Crichlow.

One of the most unique things in the history of sanitariums occurred in connection with this one. A whole town has been bought, an abandoned lumber town. With some improvements the houses can be utilized and a very good sanitarium result. It has been opened recently. Send your colored patients there.

It was impressed upon the league more and more that there must be a place for tuberculous children. The secretary visited such institutions in other states to find out cost and maintenance and our last legislature appropriated $30,000 for buildings for children at Terra Alta.

Our next effort must be for hospitals for advanced cases.

We have realized for some time that it was very necessary to do work in the rural districts. Our experience in the schools has shown us, before the draft board did so, that the city child has better physical health than the country child and we have also been convinced that according to the population there is more tuberculosis in the rural districts than in towns and cities. For lack of knowledge the people perish. Our activities have been chiefly along railroads and in large towns for the reason that roads were bad and rural districts inaccessible, but last summer we determined to overcome the difficulties and securing a Ford, the secretary with her assistant, an arrested tuberculosis case, started on an automobile campaign

through the rural districts. From May to October 21 counties were visited Towns, except small ones, were avoided, our aim being to keep to the highway. We drove over the hills, sliding off one of them, nearly mired in mudholes, forded rivers nine times in one county, went over roads nothing but boulders, drove over 3,000 miles without a puncture, had only two during the whole summer, but we did what we wanted to do and went where we wanted to go We had a stereopticon with good slides on the fly, tuberculosis and war pictures. We talked in county school houses and churches and we had the audiences too. The buildings would be packed and windows filled. In one instance the audience numbered 400. Sometimes we had an itinerary arranged in advance, but often made our own. One day we arrived in a little town about noon, determined to have a meeting, went to a store to find out about a hall. There was a store room that had been fixed up for that purpose, but the band was to use it that night. I said, "The band can play for us," and they did. Two boys were given ice cream to take around the posters and they did their work so well that we had an audience of 150 people out of a population of 185.

We visited two Boys and Girls Agricultural Camps. At one we showed the pictures on the outside of the house, at the other in the ball room of an old hotel 100 years old.

We always found places to stop near the place of meeting, although sometimes a little reluctance was shown about taking in two women driving an auto, where autos were not often seen, but we got in every time and then were cordially invited to return and make them a visit.

The people were receptive and showed much interest. We learned of cases of tuberculosis everywhere, although told by doctors they did not know of a case. We of course had no time to visit them. Literature was distributed and we feel it was altogether worth while. What is needed is a public health nurse in every county, and we hope to arouse sufficient interest to bring this about. The State Health Department could help greatly in this matter.

Doctors, do not put off your cases of tuberculosis, saying they have a cold or are run down. Even if you do not find the germ in the sputum and they do not have a cough, look out for the fever and emaciation. Don't let your patient die of your indifference or lack of knowledge. I know of a case right now, whose friends were about to send her to a sanitarium. Her doctor was asked, "Has she a fever?" He did not know. He had not taken her temperature. It was taken, found to be high and existing all the time. She was allowed to work and exercise when she should have been in bed. In her case it is too late and she might have been saved if something had been done in time.

I am sorry to say that doctors in West Virginia are still saying to patients, "The only thing for you to do is to go to Arizona," when the patient would not have sufficient money to live on when he got there, and right here in West Virginia the patient has the best chance in the world to get well. If the sanitarium is full, teach them how to live at home and by all means tell them that they have the disease while there is time to do something. Do not deceive patient and friends and let them infect others. You are just

as responsible as if it were a case of smallpox. One patient was told by her physician to walk. She did so until she walked herself almost into the grave. We have two splendid pamphlets, "What You Should Know About Tuberculosis," and "Living and Sleeping in the Open Air." The league will furnish them to physician or patient, but the personal touch is more and you can save many a life of great value by telling your patient that he has tuberculosis and must do something at once, and that only he can cure himself by following your directions. If you have not given this matter attention it is of great importance that you do so. Do not let your patients think it is a disgrace to have tuberculosis.

Make him feel he has a disease that can be cured or arrested and most patients will try in some degree to follow out his physician's advice, if the physician shows the proper interest. The friends too should be made to realize the seriousness of the disease and the importance of doing something at once.

One of our most valuable state workers was in the sanitarium for six months and has been practically well for two years. She had no cough, but she had a physician who took an interest in her case who found other symptoms just as important as the cough and she was sent early enough to get results.

PLANS FOR THE SUMMER.

Two or more nurses in the counties, as many as can be obtained and paid for. It is difficult to get even a public health nurse who knows much about tuberculosis.

A lay field worker to arrange for child welfare exhibits in small towns. The league has the exhibits and it will only cost the local expenses, the place for the exhibits and scales for weighing the children.

A man will be sent out into counties with the stereopticon to talk on tuberculosis and try to find soldiers in the locality. We are fortunate in getting a former Chautauqua lecturer, a soldier and captain, who has had four years of medical education and in other ways well qualified for the work.

In August and September an auto campaign will be made in Boys and Girls Agricultural Camps in different counties, with the stereopticon, and talks on health will be given.

In the fall the Modern Health Crusade will be pushed in the schools earlier than heretofore.

HOW IS ALL THIS WORK PAID FOR?

The League has no source of income except the funds raised by the sale of the Red Cross Seal. For ten years there has been a campaign with increasing receipts each year, but more work could be done if we had more money. The American Red Cross has given the seals each year to the National Tuberculosis Association and through them to every state organization, to sell, to raise funds for tuberculosis work. Ten per cent of the proceeds is paid to the Red Cross. Last year on account of conditions existing it was thought best not to have a campaign but in lieu of that the Red Cross gave the amount of money that would have been raised by the sale of seals.

This year there will be a Seal Sale and every one who buys a Seal helps the local and state work.

Every member of this Society should belong to the state organization, and at

least show a financial interest. We would be glad to know and feel that every member is in sympathy with the work and give all the aid he can to every worker who goes into his locality.

Announcements and Communications

Disease and famine are forming an effective barrier to a resumption of normal world trade, according to Dr. Hugh S. Cumming, Surgeon General of the United States Public Health Service, who has just returned to Washington after two years of a careful study of conditions in Europe and Asia.

"Through the various relief societies, the people of America have been made pretty familiar with famine conditions in the Old World, but so far they have no idea of the havoc being wrought by diseases," said Dr. Cumming.

"To begin with, the man-power of the world is woefully short. The war casualties alone account for much of this, but in addition to the casualties in the various armies, influenza killed off several more millions. So far as I am aware, there is hardly any place in the world that escaped the epidemic of 1918-19. Thus we have these two causes responsible for an enormous shortage in world labor. We may still add to this the effect of epidemic diseases that are even now sweeping through Asia and eastern and central Europe, regions where in normal times large quantities of raw materials and foods are produced.

"Unfortunately there are no reliable statistics available for the countries which appear to be suffering most, but we may make some comparisons which are illustrative. In the United States in a normal year, for each person gainfully employed there is a loss of nine days due to sickness, a large part of it being preventable. There were approximately 290,000 deaths from pneumonia in the United States in 1918. For every death from pneumonia in the United States we count 125 sick days. There were over 13,000 deaths from typhoid fever. A death from typhoid fever corresponds to a loss of from 450 to 500 sick days. There were over 150,000 deaths from tuberculosis. A death from tuberculosis corresponds to slightly more than 500 sick days among whites and slightly less than this among colored. While it is true that these are diseases in which the death rates are high, that is not the chief factor in causing the high economic loss. Malaria fever very well illustrates the economic loss to the world due to a disease in which the mortality rate is low. Although conservative estimates place the number of cases of malaria fever in the United States at above 7,000,000 cases annually, the death rate gives no indication of this high prevalence. Yet each case of malaria fever represents a loss of several working days and a continued lowering of efficiency. If we could eradicate this malaria in the South, and other preventable diseases throughout the nation, the increased efficiency in man-power would far more than offset the loss to the United States due to the war and the influenza epidemic.

"We know that in a number of countries of the Old World production has ceased, or become inadequate, as a result of disease. Large fertile areas have not been cultivated since the war, industries are idle, or practically so. In ad-

dition to this we are facing an extensive spread for pestilential diseases, yet these dangerous diseases can be controlled, for we know a grat deal about them. Altogether the economic loss is enormous. Typhus fever is spread by the body louse; bubonic plague by the flea-infested rat; malaria fever is spread by a mosquito.

"In the tropical countries malaria is more prevalent than it is in the southern part of the United States. It is also more deadly. In some of the West Indies malaria causes one-fifth of the total deaths. The work at Panama and elsewhere has demonstrated how completely malaria can be controlled by properly conducted sanitary operations.

"A careful survey made some years ago in the Philippines convinced experts that the efficiency of labor would be increased 30 per cent by the eradication of hookworm disease. This is fairly indicative of conditions in some other sections of the world where there is a considerable amount of hookworm. The disease is spread by improper disposal of human excreta, and can be controlled and eradicated if health officers can be properly supported in their work.

"In 1917 in British India there were 267,002 deaths from cholera, 62,277 from smallpox, 437,036 from plague and 4,555,221 from 'fevers,' a large portion of which were due to malaria. All of the diseases named here are preventable. The disease condition is probably as bad today as it was in 1917.

"I have given only the more striking instances. It would take no stretch of the imagination to figure the economic saving to the world if these preventable diseases could feel the force of a joint attack from the nations of the world. Possibly no single factor would help more to restore the world to a normal

"But there is another and more important reason why this world disease situation should concern the United States. We must be constantly alert to prevent some of these highly communicable diseases reaching this country. The typhus fever that is raging in Asia and eastern Europe is filtering through into western Europe. It will require the exercise of every precaution to prevent it becoming epidemic in some of the European nations. If that should occur it would be a gigantic task to keep it from reaching the United States.

"Even more dangerous, because more infectious, is the spread from one European port to another of bubonic plague. During the past few years plague has gradually invaded one Mediterranean port after another, so that at present there is probably no important port in that sea which does not harbor plague infection. This is really a very serious situation in view of the great increase in commerce which the United States will soon be carrying on with all the European ports. We face a trying situation and need to maintain our defensive machinery in the best possible condition. In addition to the regular quarantine officers at the various ports in the United States, the U. S. Public Health Service is now maintaining a number of experienced quarantine officers in various points in Europe, in order to keep a close watch on all of these diseases and keep the Service advised.

N. Y. POST GRADUATE HOSPITAL ANNOUNCES ENDOWMENT FUND GIFTS

Mrs. Henry R. Rea, of Pittsburgh, Pa., has given $100,000 to the New York Post Graduate Medical School and Hos-

pital's $2,000,000 Endowment Fund. This gift was announced by Dr. Ludwig Kast, a member of the Endowment Fund Committee and Professor of Medicine in the school, last week.

Mrs. Rea's benefaction, given in memory of her parents, the late Henry W. and Mrs. Oliver, of Pittsburgh, is to be used in advancing medical standards by providing additional opportunities for Post Graduate study and research to practicing physicians and surgeons.

Twenty or more scholarships are to be provided by the fund, available to doctors unable to make the financial sacrifices heretofore required in giving up their practices during the periods of post graduate work.

Mrs. Rea's gift is probably unique among benefactions to educational institutions in that it is for the benefit of active professional men to increase their unselfishness to the community. The doctor's responsibility to the public and the handicaps under which he is placed in keeping abreast of medical progress, were particularly brought home to Mrs. Rea during the war, while serving in a volunteer capacity as Field Director of the Walter Reed Hospital in Washington.

Terms under which the scholarships will be available to doctors are now under consideration by the Board of Directors of the Post Graduate Medical School. It is understood that this assignment will be based on the recommendations of state and county medical associations. The records of doctors for public service in the communities will also be an important factor in the choice, together with the usual professional qualifications.

In addition to Mrs. Rea's gift, James C. Brady of New York has given $50,000 towards the first $1,000,000 and has pledged $125,000 to help in raising the $2,000,000. Vincent Astor gave $50,000 and has promised an additional $75,000 after the first $1,000,000 has been raised.

The total of the fund as announced by Dr. James F. McKernon, Chairman of the Committee, on Saturday, is now $329,000.

April 15th, 1920.

Dr. Jas. R. Bloss, Editor
The W. Va. Medical Journal,
Huntington, W. Va.

Dear Dr. Bloss:

I am just in receipt of your esteemed favor, of the 13th instant, relative to H. R. 5123, entitled "A bill intended to bar quack veneral disease advertisements from the mail," and have carefully noted contents of same.

I assure you that I was glad to have your views relative to this matter.

I am enclosing herewith a copy of H. R. 12955, together with the report thereon. This bill was reported from the Committee on Post Office and the Post Road and was substituted by the Committee for H. R. 5123.

The sentiment of the committee was very strongly against H. R. 5123, in its original form, and you can appreciate the fact if it had been reported to the House with a majority report against it and a minority favoring same that it would not have stood any chance to pass, for members of the House in privately discussing same were open in letting it be known that the measure in its original form could not pass. In view of the sentiment privately expressed and that of the Committee it was felt that it would be a waste of time to report the measure in its original form but it was felt far better results would be obtained to re-

port the bill in form that it would stand a chance to pass the House and H. R. 12955 was therefore substituted and I am frank to say that from my observations and knowledge relative to sentiment regarding this measure I have no doubt that same, in its original form, would have been defeated both in committee and on the floor of the House.

I advised Dr. Farnsworth fully relative to my position regarding this measure and the procedure in committee and as to the feeling of members relative to same. Also that the measure had been ordered reported out. However, a number of days after I wrote him, according to the date of his circular letter, which he sent broadcast, he stated not the facts as outlined in my letter as to my position, which I would have had no objections if he did, but for some reason, which he can best explain, he did not let it be known that the committee had acted but sought to give the false impression that the measure was still unacted upon and that I was opposing same. I am frank to state that I do not think, in view of our correspondence, that his circular letter was fair to me nor as to my position relative to same. He was advised by me that the measure had been acted upon by the committee and sufficient time between the date of my letter and his circular letter to him to undoubtedly have had my letter before him. I am not criticising Dr. Farnsworth but in justice to myself I think it but fair, in view of your letter to me, to give you the facts as outlined.

I am for the passage of the bill and shall continue to do what I can to secure early and favorable action on same in the House.

I hope you will continue to write me relative to matters of interest to your profession or whenever it is felt I can be of service to the people of our state or yourself personally.

With very best wishes, I am,

Sincerely yours,

HARRY C. WOODYARD.

BOOK NOTICE

Manual of Obstetrics, by Edward P. Davis, M. D., F. A. C. S., Professor of Obstetrics in the Jefferson Medical College, Philadelphia. Second edition, revised. W. B. Saunders Co., 1919. Philadelphia and London.

This Manual of Obstetrics, designed as a help to the general practitioner who may want to quickly brush up on some particular point in connection with his obstetric practice as well as the medical student who may wish to study obstetric diagnosis from a clinical standpoint and to enable him in learning to make wise conclusions in regard to treatment, is well calculated to fill a place in the library of ready reference. It has been thoroughly revised and new matter added along the lines of a rapid advance in knowledge of this important branch of the practice of medicine. The concluding chapter on the medico legal aspect of obstetric practice is well worthy of consideration on account of the soundness of advice and conservative conclusions. The consideration of differential diagnosis of pregnancy and the technique of making pelvic measurements are models of concise thoroughness. Ceasarean section is discussed and the operation described in such a way as to greatly simplify the technique in the mind of the student who may desire at least a practical knowledge of the procedure as well as to enable him to form a sensible conclusion as to when the operation may be necessary. Taken as a whole it is a reliable guide for the general practitioner as well as the medical student.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., May, 1920.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription - - - - - - - $2.00 per year
Single Copies - - - - - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—H. R. Johnson, Fairmont.

FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

SECOND VICE-PRESIDENT—W. E. Vest, Huntington.

THIRD VICE-PRESIDENT—Joseph L. Miller, Thomas.

SECRETARY—J. Howard Anderson, Marytown.

TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

THE ANNUAL MEETING

In another place in this issue will be found the program for the Parkersburg meeting.

Be sure to read it over carefully. You will find that it promises a veritable feast of good things for us.

President Johnson and Secretary Anderson, together with the Chairmen of the Medical and Surgical Sections, are to be heartily commended for their efforts which have produced such an excellent program.

If we read on we will see that the West Virginia Hospital Association is to have a meeting which promises much.

It is to be hoped that we shall not neglect to attend the sessions of this body for a number of things very vital to the future of the hospitals of the state are to be discussed.

The prospect for a banner meeting was never brighter. Let us all lay aside our work for these three days and journey to Parkersburg, determined to help make the Fifty-third Annual Session the best one ever held.

REPORT OF THE SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE

It is to be feared that the rank and file of our profession is not paying a very great deal of attention to the work of this department of the Federal Government's activities.

This is not to be wondered greatly over when we stop to think of the unsettled state of our membership. So many are changing locations and there are many finding well-salaried positions with large corporations as directors of their welfare divisions that the small salaries and slow promotions of this service do not furnish sufficient encouragement to the younger men to induce them entering it.

At present the whole state of our government is more or less in a ferment. There is no question but that a solution for this unrest and "milling around" will come about. We feel no alarm that our system of free government will not continue to exist, for we are all Americans.

Still if we will read the report of Surgeon General Hugh S. Cummings of the P. H. S., which appears in a somewhat condensed form in this issue, I am sure we will pause and take an inventory of a very grave situation which is confronting us.

The memory of the epidemic of influenza is too fresh for us to not shake to our very marrow over the possibility of some other scourge overtaking us.

He tells us that because of the famine existing in certain countries of the near East and southeastern Europe, disease is reaching epidemic proportions. Bubonic plague and typhus are raging in some of the countries bordering the Mediterranean and that unless we exercise increasing vigilance a foothold may be gained in this country through lines of commerce from these countries.

We should give this matter serious thought and use all influence in our power to encourage all appropriations and legislation to increase the efficiency of the Public Health Service.

State News

Dr. Charles S. Smith, of Atlanta, Georgia, is now located in Beckley doing exclusive eye, ear, nose and throat work at the Beckley Hospital.

Dr. W. P. Sammons, who has been located at Cameron, has removed to Warwood Avenue, Wheeling.

Born to Dr. and Mrs. R. J. Wilkinson, of Huntington, a son.

Dr. and Mrs. L. V. Guthrie, of Huntington, have returned from Florida. Dr. Henry C. Eyman, of Massillon, Ohio, was their guest during part of their sojourn there.

Dr. L. A. Williams, of Huntington, spent sometime recently in New York City.

Dr. I. R. LeSage, of Huntington, is spending two weeks in Philadelphia attending clinics.

Drs. W. E. Vest and F. C. Hodges were recent visitors in Richmond on professional business.

Dr. Ralph Hogshead, who has been connected with McKendree Hospital No. 2 at McKendree, for two years, as House Surgeon, has located at Eagle, W. Va.,

where he will have charge of the practice of the St. Clair and Consolidated By-Products Coal Mining Company.

Dr. Glen Johnson, who was located at Wayne, has moved to East Lynn.

Dr. Gilman R. Davis has changed his location from Macdonald to Hugheston, where he is connected with the Empire Fuel Company.

Dr. Floyd Hager, a former resident of Huntington, visited in that city recently. He is now located at Chattanooga, Tenn., and was elected mayor of Alton Park, a suburb of Chattanooga, at a recent election.

The American Medico-Psychological Association will hold its Seventy-Sixth Annual Meeting June 1st, 2nd, 3rd and 4th, Hotel Statler, Cleveland, Ohio. Officers of same are: Dr. Henry C. Eyman, President, Massillon, Ohio; Dr. Owen Copp, Vice President, Philadelphia; Dr. H. W. Mitchell, Secretary-Treasurer, Warren, Pa. A most interesting program has been prepared.

Dr. Thomas A. Harris, who had made his home in Parkersburg, W. Va., since 1866, died at his home in that place February 29, at the age of 90 years. He was a graduate of the University of Virginia Medical School and was an ex-president of the West Virginia Medical Society.

Society Proceedings

The regular meeting of the Cabell County Medical Society was called to order at 8:30 p. m., by the president, at thtd Hotel Frederick. The secretary read the minutes of the previous meeting which were approved as they stood.

Upon invitation the Huntington Dental Society met with us.

The program for the evening was "Focal Infections," the dental side of which was presented by Dr. I. J. Kail and the medical by Dr. F. O. Marple, in two interesting and instructive papers.

Dr. Summers opened the discussion of Dr. Kail's paper, and Dr. Geiger that of Dr. Marple, followed by Drs. Hodges, Vest, Kail and Marple.

Upon completion of the scientific program the members adjourned to the Dutch room where refreshments were served.

Number present, 47.

F. C. HODGES, *Secretary.*

The Cabell County Medical Society met at its regular session at the Hotel Frederick, at 8:30 p. m., the meeting being called by order of the president.

The secretary read the minutes of the previous meeting which stood approved.

Dr. J. A. Guthrie presented some instructive and well studied case reports of various forms of cancer, which were discussed by Drs. J. Ross Hunter, R. J. Wilkinson, A. K. Kessler, Jas. R. Bloss, W. W. Strange, I. Clay Hicks, E. S. Wells, A. J. Watts and J. A. Guthrie.

Dr. E. B. Gerlach read an instructive essay entitled "Indigestion and Abdominal Pain," in which he emphasized the fact that indigestion is usually a symptom, not a disease, and he also warns most emphatically against giving purges in acute surgical abdomens, and further states that all cases should be well studied to rule out a surgical condition

before purging. This essay was discussed by Drs. Wilkinson, Vest, Bobbitt and Gerlach.

There being no further business the meeting adjourned.

Number present, 33.

F. C. HODGES, *Secretary.*

Dartmoor, W. Va.,
April 17, 1920.

Editor West Virginia Medical Journal:

The Barbour-Randolph-Tucker County Medical Society met in the Y. M. C. A. building, at Elkins, April 15th, 1 p. m., the following members being present: Drs. Butt, Vernon, Moore, E. F. Wilson, Lanich, Pierce, Irons, Bosworth, A. S. Holsberry, Talbott, Golden and Perry. Dr. Lanich presided.

Minutes read and approved.

The report of the committee on Necrology was postponed until next meeting, that further discussion would be possible. The secretary was instructed to secure a report on the life and work of Dr. Isaac Smith, who died on Jan. 15th, 1920.

The resolution recommending the manner of appointing Health Officers, presented by Dr. A. S. Bosworth at previous meeting, was postponed, till Dr. Bosworth could be present, at a later hour.

Dr. B. L. Liggett, of Mill Creek, on suspension of rules, was elected to membership in the society.

On motion of Dr. Butt the society decided to meet in Tucker county in July, the time and place to be arranged by local members.

Dr. C. T. Vernon read an excellent paper on Angina Pectoris, giving the general theory of its etiology and pathology, but stating that an exact knowledge of its real cause is not well defined. He reported a case he had, in which the patient complained of a severe pain in the left arm, the cause of which, in connection with this trouble, he was unable to explain.

The paper was briefly discussed by Drs. Butt and Moore.

Dr. Butt reported eight cases of what he said he believed to be types of Encephalitis Lethargica, though some of the more prominent, usual symptoms were present in only a small degree. The Lethargic condition so pronounced in most cases, were not marked in some of his cases. There was no history of previous attacks of flu. Four of these cases resulted fatally.

Dr. Lanich discussed one case, under consultation with Drs. Butt and Miller, in which the symptoms were not well defined. The patient is improvng.

Dr. Golden reported a case of strangulatul femoral hernia in a child, which being operated upon by him, revealed a destruction of the strangulated parts. The parts were exhibited. The child made an uneventful recovery.

He also reported a case, which from all external physical symptoms, would have been diagnosed as advanced tuberculosis. The patient, running an irregular temperature, having profuse sweats and being emaciated. However, anscultation revealed no lung lesion, and the microscope no tubercle bacilli. The microscope did, however, reveal blastomicrotic germs, proving the case to be blasto-microsis of internal organs — a very unusual disease of such parts. The case is improving on iodide treatment.

Dr. Bosworth's resolution was as follows:

"Whereas, Public Health Officials are too often selected because of their influence and activity in politics, to the prejudice and efficiency of such boards, and,

"Whereas, Public Health Boards are

as a rule changed to conform to the political beliefs of the party in power, regardless of their zeal and ability to serve the public, and,

"Whereas, The Medical Profession is the most competent authority to pass upon the qualifications and fitness of its own members for positions of public service;

"Therefore, Be It Resolved, That it is the sense of the Barbour-Randolph-Tucker Medical Society that the statutes of the state be so amended that prospective appointees to state, county and municipal Health Boards shall obtain the endorsement of their concurrent Medical Society as a prerequisite for appointment."

The resolution was taken up, endorsed by the society, and the secretary directed to send a copy to the Legislative Committee of the State Medical Society, with recommendation of society.

Dr. Butt moved that the delegates to the State Medical Society meeting be instructed to urge greater care in the expenditure of the funds of the society, with a view to lowering the membership fees, which are now becoming excessive. The resolution was adopted.

The Society then adjourned to meet in Tucker county in July.

J. C. IRONS, *Secretary.*

MEDICINE

IRREGULARS AND THEIR METHODS

Irregular practitioners do not prosper because their therapeutic methods are successful, but because of the advantage they take of sick people. Why not put an end to the taking of this advantage? It is now unethical to guarantee a cure; why not make it unlawful as well by the enactment of special legislation? The taking of money in advance of treatment should constitute prima facie evidence of fraudulent intent. If it were accepted after unsuccessful treatment, the failure to cure should then constitute proof of fraud, assuming the previous guarantee. Restitution of the fee should be included in the penalty.—Weekly Bulletin, Department of Health, N. Y. City.

VACCINE TREATMENT OF ARTHRITIS, RHEUMATISM, AND NEURITIS

H. Warren Crowe (*Lancet*, October 11, 1919) discusses the causes of failure of the vaccine treatment of these conditions under six headings: 1. False diagnosis. 2. Errors in bacteriology. 3. Incorrect or inefficient vaccine. 4. Faulty administration of the vaccine as regards dose and interval. 5. Peculiarities of the constitution of the patient and his response to vaccines. 6. Mistakes in general treatment. The first and last of these causes of failure should be avoided fairly readily by proper care. The second cause may be extremely difficult to avoid in some cases because it is so fatally easy to find an organism that one may readily fall into error in ascribing to the organism found the role of being the chief causative factor when in fact it is of no importance and other organisms are the real causes. Care must be the chief factor in overcoming such an error. The third cause of failure depends largely upon the first two. The faulty administration in regard to dose and interval can best be avoided by keeping a careful watch upon the patient's reactions, and especially by observation of his daily weight. A steadily falling weight is the surest indexof wrong dosage or interval. Better results are often secured from the use of mixed stock vaccines than from autogenous vaccines on account of the difficulty frequently en-

countered in determining the precise organism which is causing the disease in the patient under consideration. The author believes that the use of vaccines in the conditions named will usually give more satisfactory results than any other form of treatment if the proper precautions are observed.

LEMON JUICE IN THE TREATMENT OF STOMATITIS AND GLOSSITIS

Leven (*Presse medicale*, February 20, 1919) used lemon juice empirically in various forms of stomatitis and glossitis with marked success. Even in recurring mucous patches which had proved rebellious to all treatment, the addition of lemon juice applications to the specific measures was followed by disappearance of the patches. The lemon exerts an immediate analgesic action on the fissured lesions commonly met with in long standing cases of gastric disorder. In all these affections citric acid alone is much less effective than lemon juice.

A CASE OF LETHARGIC ENCEPHALITIS

Grenet (*Presse medicale*, February 24, 1919) reports the case of a boy of fourteen years who, though presenting at first the manifestations of ordinary mumps, soon developed all the recognized symptoms of lethargic encephalitis. Along with strabismus, slight stiffness of the neck with Kernig's sign, and trismus, the child showed enlargement of both parotids and an erythematous pultaceous stomatitis. Lumbar puncture yielded fluid rich in lymphocytes. At first a diagnosis of meningitis due to mumps seemed indicated, but on the succeeding days, while the parotid swelling was going down, there appeared ptosis, at first on one side, then bilaterally; frontal paresis, dysphagia, and aphonia. The child was inert and somnolent. The condition later gradually improved, but there persisted a weakness of the lower extremities with difficulty of locomotion, and roughness of the voice. In spite of the initial symptoms suggesting mumps, the author does not believe that mumps was actually present. The child belonged to a large family with seven other children; none of the latter contracted mumps, though no attempt at isolation had been made.

TREATMENT OF SEBORRHEA CAPILLITII

H. Merz (*Correspondenz-Blatt fur Schweizer Aerzte*, March 1, 1919) advocates the use of a preparation of sulphur, called sulphur snow, in which the particles of the substance are very minute. His method of treatment is as follows: A thorough shampoo weekly with soap and borax, carefully rinsed off and the scalp dried. As soon as the scalp is dry, and while the roots of the hairs are still moist, a two to five per cent ointment of sulphur snow is to be rubbed in. After three days the application of sulphur snow is to be repeated, but without the preliminary shampoo. In obstinate cases, or where there are atony and faulty growth of the hair, he recommends a course of twelve sittings of irradiation with the Kromayer quartz lamp; two irradiations a week with a pause of from two to four weeks after the sixth. As prophylactic measures against seborrhea he recommends a shampoo with soap every week or two, the inunction of sulphur snow once or twice a week, sometimes the use of the powder when there is very much fat, and the application of an alcoholic tonic.

SOME RECENT DEVELOPMENTS IN OBSTETRICS

F. R. Oastler (*Am. J. Obst.*, 1919, lxxix, 659). Today obstetrics is a surgical procedure taught under the general principles of surgery, belonging to the department of surgery, and enjoying the careful technique given the surgical operation. With the assumption of this surgical position in obstetrics has come about the antepartum care of obstetrical patients both in the hospital and private practice.

Modern antepartum care may be summarized as follows: (1) the care of the mother, (2) a thorough examination of the pelvis, (3) a printed card given each patient which details instructions as to habits, exercise, sleep, abnormal symptoms, the adjustment of the corset, the examination of the urine, etc., (4) accurate bi-weekly examination of the urine, (5) methods for ameliorating the vomiting of pregnancy, and (6) the determination of the blood-pressure.

The author mentions, in order to condemn, socalled appointment obstetrics, a procedure conceived more for the convenience of the accoucheur than for the safety of the patient. When once a bag is introduced, the vaginal route is exposed to possible infection, and if other measures have to be taken later, caesarean section, forceps, or version, a natural labor is made dangerous. The induction of labor by bags is an extremely useful procedure when indicated, but only when indicated, and the convenience of the mother and physician is not an indication. The baby has some right in the matter.

Rectal instead of vaginal examinations are rapidly growing in popularity. Experience has shown that internes readily acquire the necessary sense of touch to determine the presentation, and position of the child and the condition of the cervix.

In order to avoid severe laceration as far as possible, the operation of episiotomy has come into favor and justly so. Caesarean section has also taken its proper place among the common surgical procedures of the day. It has supplanted accouchement force and high forceps in most cases and the operation of version in many.

That the obstetrical patient of today is better cared for than formerly is emphasized particularly in the gynecological clinics where it is a matter of common knowledge that obstetrical injuries requiring repair are far less common than formerly and that the after-care of the patients has much to do with this.

Bearing children is woman's most glorious work, but also the most serious. Consequently it is her right to be safeguarded. With obstetrics considered to be a surgical procedure and with the introduction of proper care before and after childbirth, mortality and morbidity will be lowered and physicians will receive better compensation for better work.

THE TOLERANCE OF FRESHLY DELIVERED WOMEN TO EXCESSIVE LOSS OF BLOOD

Am. J. Obst., 1919, lxxx, 1. The present study concerning the amount of blood lost during the third stage of labor and shortly thereafter and its clinical effects is based upon observations made upon 1,000 consecutive spontaneous full-term labors which occurred in 1,339 obstetrical patients at the Johns Hopkins Hospital.

Three hundred and thirty-nine histories in the series were not utilized as they included 162 operative cases as well

as 177 others in which pregnancy had terminated prematurely or the patients left the hospital before delivery.

After the child is born the uterus is gently palpated and the location of its fundus noted, but massage is not employed unless the uterus is boggy in consistency or the bleeding excessive. After the lapse of from five to thirty minutes it is usually noted that the uterus has risen 4 to 6 centimeters above its original location, while in some cases an indistinct swelling has likewise appeared just over the symphysis.

The author states that he has been unable to convince himself that there is any advantage in waiting a specified length of time before expressing the placenta. The typical Crede method of expression is employed only with the greatest circumspection and only in the presence of serious bleeding or after spontaneous separation of the placenta has failed to occur within one hour after the birth of the child.

Upon determining the amount of blood lost in 1,000 spontaneous labors, the average bleeding was found to be 347.7 cubic centimeters, with the extremes varying from zero to 2,400 cubic centimeters. In two cases the placental period was entirely bloodless. It must not be understood, however, that this average loss gives a correct idea concerning the amount of the bleeding most apt to be encountered in spontaneous labor. The latter amounted to less than 300 cubic centimeters in 527 out of 1,000 cases.

Not a few freshly delivered women lost excessive quantities of blood without presenting any evidence of shock, and occasionally the extent of the hemorrhage would not have been appreciated if the blood lost had not been collected and measured.

Only one of the 31 women who lost between 1,000 and 1,250 cubic centimeters presented immediate symptoms attributable to loss of blood. This patient was considerably shocked and had a pulse rate of 118 one hour and a quarter after delivery. Only 4 of the 18 patients losing from 1,250 to 2,400 cubic centimeters caused any anxiety; none was seriously ill and all recovered.

It is currently believed that the pulse is unusually slow during the normal puerperium, and that the best method of evaluating the effect of hemorrhage is based on its increased rate and poor quality. The observations reported, however, show that the first assumption is incorrect, and that in freshly delivered women, the second is not regular.

The average pulse rate was 91.66 in non-hemorrhagic cases and 96.45 in hemorrhagic cases, a fact which apparently indicates that the average effect of hemorrhage is to raise the pulse rate by only 5 beats.

It is apparent that a certain proportion of freshly delivered women may lose from 1,250 to 2,400 cubic centimeters of blood with comparatively little danger and present such slight immediate symptoms that the extent of hemorrhage might escape recognition if the blood were not collected and measured.

If the usual computation that the total amount of blood in the body corresponds to one-thirteenth of the total body-weight be accepted and if it is assumed that the latter averages 130 pounds, such hemorrhages mean that the patients lost from one-quarter to one-half of their total blood. In males and non-pregnant women such a loss would inevitably be followed by alarming symptoms of shock and acute anaemia, yet the latter did not appear in any of the patients whose cases

are here recorded nor was their general condition so serious that transfusion was at any time necessary.

In order to avoid any possibility of misunderstanding, the author emphasizes strongly that he does not claim that freshly delivered women are entirely immune to excessive hemorrhage.

SURGERY

A NEW INCISION FOR APPENDECTOMY

Leigh F. Watson (*Boston Medical and Surgical Journal*, April 17, 1919) advocates an incision from a point one and a half inch from the right anterior superior spine, on a level with a line connecting the two superior spines, vertically downward for two or three inches to a point just above, and to the inner side of the internal abdominal ring. He claims the advantages of this incision to be: Traction to expose the appendix is avoided, because this incision, in the external oblique and its aponeurosis, the most resistant structures, is directly over the base of the appendix. It can be enlarged without weakening the abdominal wall. The iliohypogastric and ilioinguinal nerves are not injured because the incision lies between them. Because this incision is made over the cecum the small intestines do not crowd into the wound as they do when the McBurney and lateral rectus incisions are used.

REMOVAL OF A COMPARATIVELY HEALTHY GALLBLADDER

W. H. Magie (*Journal-Lancet*, April 15, 1919) draws upon his personal experience in 300 operations upon the gallbladder when he pleads for saving that viscus wherever possible. He believes that it should be preserved for the following reasons: Because it has a function in the storage and regulation of the bile, both with reference to time of delivery into the intestine and with reference to the pressure in the bile capillaries; because the organ is of great value for drainage purposes when drainage is necessary, thus constituting a safety valve, and because the mortality from cholecystostomy is much less than from cholecystectomy. The proper performance of cholecystostomy is not followed by the necessity for secondary operation in more than five per cent of the cases. Drainage should be continued for a long period of time and the removal of the drainage tube should be followed by daily irrigation of the gallbladder, the latter contributing very largely to the complete eradication of infection, the escape of undiscovered stones, and the restoration of the viscus to normal. Acute cholecystitis of brief duration, recurrent cholecystitis without great thickening of the bladder walls or obstruction of the cystic duct, and all cases of simple cholelithiasis should be treated by cholecystostomy and drainage. Cholecystectomy should be performed in cases with stricture of the cystic duct, in many cases of acute gangrene, in all cases with embedded stones in the cystic duct causing ulceration, in all very thick walled bladders, in all cases with ulceration from pressure of large stones, and in cancer.

A STUDY OF CERTAIN BANDS IN THE RIGHT UPPER ABDOMINAL QUADRANT

Commander William Seaman Bainbridge, M. C., U. S. Navy, of New York, stated that his object was to draw attention first, to some points which had proved of practical value to him when operating upon the abdominal viscera; second, to report in brief some selected illustrative cases.

1. The prone position often failed to give the surgeon an exact conception of the conditions present when the abdomen was opened. Early bands and adhesions were often overlooked or their importance not realized. The reverse Trendelenburg would be of assistance in arriving at an exact diagnosis, but this frequently was not sufficient. We must put traction downward on the hollow organs so as to picture what would be the relations if the erect posture was assumed.

2. It was only after the anatomist placed the body erect, froze it in that position and made sections, that the exact anatomy of the body cavities and their organs was determined. The rontgenologist early realized that much could be learned by an examination in the upright position. Would not a few dissections made by the abdominal surgeon, with the body upright, be of great value in preparing him for his work? Doctor Bainbridge had found it so.

3. Many a small band or adhesion when seen in time, and its significance understood, would, if treated adequately, prevent more serious conditions.

4. Breaking up of adhesions was an unfortunate term. In very bad cases that might be all one could do; that is literally tear out these bands and hope that chance would bring those which would inevitably reform in places where they would not do as much harm as before. Success sometimes followed such a course, but more often failure. By carefully dividing bands transversely and suturing longitudisally, by flaps of peritoneum or of omentum or skin grafts, many a case of distressing adhesions could be cured.

5. Early adequate attention to bands and adhesions in the right upper abdominal quadrant often made such operations as cholecystotomy, cholecystectomy, and gastroenterostomy unnecessary.

6. Might it not be possible that by a just estimate of the mechanics of the abdomen and careful attention to the lessons learned, we might better order our lives from the beginning and so often prevent the formation of bands and adhesions, thus obviating their serious sequelle?

BONE TRANSPLANTATION

Barney Brooks (*Annals of Surgery*, February, 1919, showed in a series of experiments that a relatively large proportion of instances in which the ordinary bone transplant with periosteum and endoesteum failed to regenerate a bone defect when the transplantations were made in animals which were not young. In other experiments similar transplants of bone in young animals have been successful when there was no obvious reason, such as infection, for their failure. The experiments showed that transplants of growing bone resulted in a much larger proportion of successes than the normal bone transplants. The success or failure of a transplant was determined by both internal and external factors. The latent power of the osteoblasts to multiply and produce bone is an internal factor and wouold seem to depend on the intrinsic latent power of regeneration of the bone from which the transplant was taken. The adequate supply of nutrition for growth of the bone producing cells must come from the bed into which the transplant is placed and is an external factor. It is not clear whether the large number of failures of free bone transplantation in old animals was the results of internal or external factors. It was also not clear whether the grow-

ing bone transplant is successful in a larger proportion of instances than the normal bone transplant because it contains cells with greater power of growth or because the growing tissue with its numerous thin walled vessels and tissue spaces more readily acquired nutrition from the bed in which the transplant was placed. It was concluded that autogenous transplants of normal bone with periosteum and endosteum fail to regenerate successfully in bone in a relatively large proportion of instances if such transplants are done in animals well advanced in life. Autogenous transplants of growing bone succeed in a larger proportion of instances than autogenous transplants of bone note in the state of the active growth or regeneration.

SURGICAL CONDITIONS IN THE MOUTH

The tooth brush has become such a fetich in our generation that it would seem almost like heresy to say anything that might suggest that unless used properly and carefully it might do more harm than good. The teeth of mankind among civilized peoples at the present time are so bad that we simply must review all the conditions relating to the mouth if we would determine positively what are the causes at work encouraging deterioration of the teeth. The tooth brush is among these and must be weighed with the rest. The implement was never used so much as it is at the present time and yet the teeth of mankind were never so bad. The question must arise, therefore, Is the tooth brush the effect of the recognition of this state of affairs? That is, is the tooth brush now being used so much because it was never felt to be needed so much, or, once mouth infection has taken place, does it play a definite role in the causation of the very unsatisfactory condition of the teeth of the present generation?

Considering how serious the conditions are within the mouth, the investigator would be perfectly justified in asking how the use of the tooth brush came into vogue. The immediate answer to this would be, that instead of coming in as a cleansing agent, the tooth brush was originally intended as a polishing tool. A good many fastidious people wanted to have their teeth look clean and shining and so they brushed them. In order to aid in this polishing process various tooth powders were invented. We have a whole series of them, from the Middle Ages, in which chalk and ground bones of various kinds and certain other polishing materials were used rather freely, down to the present time. For polishing purposes the brush had to be drawn rapidly to and fro across the surfaces of the teeth. This is the way the tooth brush was used originally and has been used ever since.

Later, the tooth brush was set up as a cleansing instead of a polishing agent and the idea of its use was that it would brush away particles of food that have lodged here and there in the mouth and keep them from decomposing and thus prevent the spread of decay to the teeth. Once decay has taken place, however, the use of the tooth brush is about as unscientific a procedure as could well be imagined. The brush is rubbed vigorously over decayed surfaces and then just as vigorously over teeth as yet unaffected. We know that tooth decay is due to bacteria and it is easy to understand that once there was even a slight cavity in any of the tooth surfaces the brush would become thoroughly infected with bacteria and carry these all around

the mouth. Wherever there was a crack in the enamel bacteria would be rubbed in.

Once there is an infection in the mouth the tooth brush carries it all over and particularly rubs it into the edge of the gums just where, because of the pressure of the tooth itself, circulation may be slightly interfered with and resistive vitality is lowered. Rather coarse brushes are used, cold water is often recommended to keep the bristles good and stiff, and it is easy to understand how many slight injuries of the thin edge of the gums where they come up to the neck of the tooth must necessarily be inflicted. Into all of these the tooth brush rubs indiscriminately whatever bacteria it may have gathered anywhere throughout the mouth and it is no wonder that receding gums and the collection of tartar beneath the gums is one of he special mouth troubles of our time and is causing the loss of a great many teeth. The collection of tartar has often been set down as due to speracid or other pathological conditions within the mouth, but the more we have studied such formations throughout the body the more the presence of a series of microbes has been found as the immediate cause. We used to blame gallstones on all sorts of biliary conditions, but microbes have been found as the nucleus of most of them and we know now that it is practically always an infection of some kind that lays down the favorable conditions for the formation of calculi anywhere in the body. The tooth brush from a surgical viewpoint, then, cannot be looked upon without serious suspicion. Is it possible, however, that we are in the presence of two evils, one of them the tooth brush, the lesser evil, and that it does more good than harm? Is it possible that it carries to the mouth in its various parts substances that are so precious in their action in preventing decay that brushing the teeth is a real benefit, though it is connected with some unfortunate abuses in the wide diffusion of the microbic flora of the mouth which it invites and indeed encourages by its activity? We leave the question of the tooth brush as an extremely unsanitary instrument in the light of the present day bacteriology for our readers to think about.—Ed. N. Y. Med. Jour., Nov. 29, 1919.

Book Reviews

Bartlett—"After Treatment of Surgical Patients," by Willard Bartlett, A. M., M. D., F. A. C. S. and Collaborators, in two volumes. The C. V. Mosby Co., St. Louis. Price $10.00.

Every once in awhile there appears upon the medical book horizon among the vast conglomeration of later day productions, a work of more than ordinary merit. In this class we would give Bartlett's "After Treatment of Surgical Patients" a prominent place. While it is true "in the majority of instances, that the need of after-treatment is in inverse proportion to the quality of work done on the operating table," it, in our opinion, very often happens that some port-operative, minor attentions, judiciously carried out will contribute very materially to the comfort and well being of the patient as well as aiding in securing much desired end-results. Such a work as this aspires to be naturally divides itself into two parts, as the author states in his preface: One taking up the general subject, the other dealing with the technique of after-treatment. With these objects in view the work is published in two volumes, thus contributing very, very materially to both

systematic treatment and the convenience of the reader, be he either student or practitioner. There are eleven special chapters contributed and headed by the author's names. These men are evidently capable of handling their several subjects in a comprehensive, up-to-date manner. After a careful examination we feel amply justified in recommending this work as a text-book and guide, especially suited to the use of the student, the general practitioner, who does emergency and occasionally general surgery and to the specialist who may at times find use for a quick reference work. Bibliographies are appended to numerous chapters and the illustrations are numerous and beautifully executed.

The Essentials of Materia Medica and Therapeutics. By John Foote, M. D., Assistant Professor of Therapeutics and Materia Medica, George Town University School of Medicine; Instructor in Materia Medica and Therapeutics, Providence Hospital Training School for Nurses. Third edition, revised, enlarged and reset. Price $1.75. J. B. Lippincott Company, Philadelphia and London.

This small textbook has always been favorably looked upon by both teachers and nurses. In its present revised and enlarged form it will be found to be well abreast of the present day teachings. It has a comprehensive reference list of Drugs and Tables of Poisons and Antidotes, Dose Tables, a Resume of the Relations of the Nurse and the Harrison Narcotic Act and a number of valuable miscellaneous formulas in addition to its other points of excellence.

PROGRAM OF W. VA. STATE MEDICAL ASSOCIATION, MAY 18th, 19th and 20th, 1920

GENERAL ASSEMBLAGE

TUESDAY, MAY 18, 9:30 A. M.
Auditorium, Elks' Home.

Call to Order—Pres. H. R. Johnson, M. D., Fairmont.

Invocation—Rev. Gill I. Wilson, Parkersburg.

Welcome on Behalf of County—Judge L. N. Tavenner, Parkersburg.

Welcome on Behalf of Society—H. M. Campbell, M. D., Parkersburg.

Response on Behalf of Association—Charles O'Grady, M. D., Charleston.

SCIENTIFIC PROGRAMME

1. Diagnosis and Treatment of Early Syphilis—William S. Robertson, Charleston.
2. Serology of Syphilis in Relation to its Pathology—F. C. Hodges, M. D., Huntington.
3. Demonstration of a Simplified Technic for Widal Test—Walter E. Vest, M. D., Huntington.

TUESDAY, MAY 18, 1:30 P. M.
Auditorium, Elks' Home.

4. Medical Education — Jno N. Simpson, M. D., Morgantown.
5. The School, the Teacher, and the Physician — S. S. Wade, M. D., Morgantown.
6. Microbe and Men—W. W. Brown, M. D., Shenandoah Junction.
7. A Thousand Babies—C. H. Maxwell, M. D., Morgantown.
8. Choke Disk in Diagnosis — E. D. Wells, M. D., Huntington.
9. The Psycho-nuroses and Allied Conditions—G. H. Barksdale, M. D., Charleston.

10. Mythomania or Pathological Mendacity—Tom A. Williams, M. D., Washington, D. C.

11. Manic-Depressive Psychosis—L. V. Guthrie, M. D., Huntington, W. Va.

TUESDAY, MAY 18, 8:00 P. M.
Auditorium, Elks' Home.

11. President's Address—H. R. Johnson, M. D., Fairmont.

12. Oration on Surgery — Charles M. Scott, M. D., Bluefield.

13. Oration on Medicines—R. W. Fisher, M. D., Morgantown.

14. Address — "The American Red Cross."

MEDICAL SECTION

WEDNESDAY, MAY 19, 9:00 A. M.
Auditorium, Elks' Home.

15. Rat Bite Fever—A. Arkin, M. D., Morgantown.

16. Influenza: Past and Present—H. E. Gaynor, M. D.,Parkersburg.

17. Technique of Examination of Chest in Tuberculosis—J. W. Moore, M. D., Charleston.

18. Diagnosis and Treatment of Gastro and Entro-Optosis—L. O. Rose, M. D., Parkersburg.

19. Infant Foods and Infant Feeding—Arthur A. Shawkey, M. D., Charleston.

20. Obstetric Abnormalities — W. F. Bruns, M. D., Ceredo.

21. Report of Case of Vaginal Septum and Bichornate Uterus — H. G. Steele, M. D., Bluefield.

22. Organo-therapy in Gynecology: With Special Reference to the Pituitary—M. V. Godbey, M. D., Charleston.

SURGICAL SECTION

WEDNESDAY, MAY 19, 1:30 P. M.
Auditorium, Elks' Home.

23. Dislocation of the Semilunar Bone: Report of a Case in Which Reduction Was Successful — W. W. Golden, M. D., Elkins.

24. Fracture of Long Bones — J. E. Cannaday, M. D., Charleston.

25. Osteo-Myelitis—Thomas E. Romine, M. D., Charleston.

26. Pre-operative Localization of the Acute Appendix—Robert J. Reed, M. D., Wheeling.

27. A Plea for the Normal Appendix: Its Physiology as Viewed from a Surgical Point—H. G. Nicholson, M. D., Charleston.

28. Baldwin's Operation for Congenital Absence of Vagina, Report Two Cases—Wade H. St. Clair, M. D., Bluefield.

29. Pancreatic Cyst: With Report of Case—J. E. Rader, M. D., Huntington.

30. Heat and Cold in the Treatment of Superficial Inflammation—W. W. Strange, M. D., Huntington.

31. Foreign Bodies in the Air Passages —T. W. Moore, M. D., Huntington.

PUBLIC HEALTH SESSION

WEDNESDAY, MAY 19, 8:00 P. M.
Auditorium, Elks' Home.

32. West Virginia's Need of a New Vital Statistics Law — Carl F. Raver, M. D., Vital Statistician, State Health Department.

33. The Health Center as a Factor in Disease Control — S. L. Jepson, M. D., State Health Commissioner.

34. Address on "Preventive Medicine" —A. J. McLaughlin, M. D., Asst. Surgeon General U. S. Public Health Service, Washington, D. C.

HOUSE OF DELEGATES

THURSDAY, MAY 20, 8:00 A. M.
Parlor "A," Elks' Home.

Election of Officers.
Unfinished Business.

PUBLIC SURGICAL SESSION

THURSDAY, MAY 20, 8:00 A. M.
Auditorium, Elks' Home.

CANCER SYMPOSIUM

35. Cancer Campaign: Lantern Slides —Andre Crotti, M. D., Columbus, O.
36. Radium in the Treatment of Cancer—Curtis F. Burnam, M. D., Baltimore, Md.
37. Early Recognition of Lesions Which May Be Cancer: Lantern Slides—J. C. Bloodgood, M. D., Baltimore, Md.
38. Discussion Opened by F. LeMoyne Hupp, M. D., Wheeling.
39. Cranioplasty: With Moving Picture Demonstration—Joseph E. King, M. D., New York.

GENERAL SESSION

THURSDAY, MAY 20, 1:30 P. M.
Auditorium, Elks' Home.

40. Pre-operative and Post-operative Care of Prostatic Enlargements—J. W. Mathews, M. D., and R. M. Bobbitt, M. D., Huntington.
41. Prostatic Infections and Their Treatment—E. O. Smith, M. D., Cincinnati, O.
42. The Mechanism and Clinical Interpretation of Uterine Bleeding: Lantern Slides—Emil Novak, M. D., Baltimore, Md.
43. Obstetric Difficulties and Their Management: With Special Reference to Newer Methods of Cesarean Section—Carter S. Fleming, M. D., Fairmont.
44. Surgical Treatment of Birth Trauma — J. M. Emmett, M. D., Huntington.
45. Rupture of Rectum During Labor —A. J. Noome, M. D., Wheeling.
46. Some Recent Advances in Treatment of Rectal Diseases—R. J. Wilkinson, M. D., Huntington.

BANQUET

THURSDAY, MAY 20, 8:00 P. M.

Toastmaster—S. D. H. Wise, M. D., Parkersburg.

ANNUAL MEETING OF THE STATE HOSPITAL ASSOCIATION OF WEST VIRGINIA

Chancellor Hotel, Parkersburg, W. Va.
May 19, 1920.

2 p. m.—Appointment of Committees.
3 p. m.—Physician and Hospital—Dr. H. E. Gaynor, Parkersburg.
Discussion.
Hospital Inefficiency—Dr. Robert Wilkinson, Huntington, W. Va.
Discussion.
Profit and Loss of the Modern Hospital to the Community—Dr. A. K. Kessler, Huntington, W. Va.
Discussion.
Round Table.
8 p. m.—Hospital Management — Dr. Robinson, Superintendent, Ohio Valley Hospital, Wheeling, W. Va.
The Teaching of Pupil Nurses—Dr. Wm. W. Strange, Huntington, W. Va.
Report of Committees.
Election of Officers.
Adjournment.

DR. J. A. GUTHRIE, *Pres.*
MISS EMMA VERNON, *Secy.*

The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Med. Assn.

Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
Assistant Editors
Huntington, W. Va.

Entered as second-class matter, January 1, 1916, at the Post Office at Huntington, W. Va.

VOL. 14—NO. 12. HUNTINGTON, W. VA., JUNE, 1920. Subscription $2.00 per Year
Single Copies 20 Cents

THE PRACTICAL SIDE OF A HEART MURMUR.

By Harry M. Hall, M. D.,
Wheeling, W. Va.

Read Before the W. Va. State Medical Assn., Clarksburg, May, 1919.

In presenting this paper on the practical side of a Heart Murmur, it will be found quite readily that there is no new matter presented therein and the question may well be put "Why write it at all?" If, however, there are still some additional lessons that one may feel might be drawn from the old material then it is reasonable to go ahead and try to draw them. This alone is the whyfore of this paper.

Then again one thinks, "Who ought to write a paper anyway?" There are those that contend a laboratorian is the only one fitted. But he can't do it from a clinical standpoint because his dogs haven't rheumatism, his mice are not sclerotic, and his rabbits have not had the erysipelas, therefore, his lessons cannot be the help they could be if these were so.

Should a special clinician working in a hospital be the one to do it? Perhaps yes, but he again sees things very largely through others' eyes and having no relation personally, he misses much which, talk as you will, in the end is valuable. Should the general practitioner do it? Perhaps no, on account of the hurry in which he performs his work and the haste with which he draws his deductions, he is not entitled to consideration, but this idea is often erroneous as he can make surprisingly quick and keen deductions, which are often singularily free from error and being cognizant of the personal side, are very apt to be surprisingly final.

That these three elements cannot meet together and compare notes, each one treating the other as of an equality, is to be regretted, because the last word on the intricacies of the human heart will not be known until they do.

The writer, perhaps, cannot qualify as an expert in any one of the three classes,

except that he listened to over two thousand hearts in the late draft and has examined many thousands of insurance cases and while doing these, he has come to believe that much that we say of the heart means little, and a little of what we do not say means much and for this reason he essays to speak of the matter.

Before we embark on any discussion, let us stop to consider if we really know what we mean when we say such and such a patient has "Heart Failure." I believe the term is forbidden on certain blanks of vital statistics and yet after all it is quite a reasonable term for what really is the matter when other and more high sounding terms are employed. Because it implies a thing which is really the truth and that is, that most cases of real advanced heart disease are collective conditions which are not irregularities nor murmurs nor water hammer pulses, nor anginas, but collectively a lot of untoward activities, which, for want of a better name we style "heart failures" or cardiac embarrassments.

The main trouble with the diseases of the heart is that we assume a great deal to have happened to the heart because from the standpoint of mechanics we feel it ought to be that way, and all would indeed be well if it were not that we see too many cases that are not what they should be when they come to post mortem. For instance, a case that ought to have such and such a murmur and back pressure has on necropsy, no evidence at all and frequently a regurgitant ventricle that should have had quite a murmur of the first class has none at all. To add to the complexity, a practically normal heart can have a heart murmur which will not be caused from an anaemia but will seem to be due solely to the way the valves close.

Let us review the usual facts given. We know we have the four areas where sounds may be heard and that the phenomena consists of pairs of sounds separated by an interval or pause. Each pair being separated by a longer interval or pause. The first sound is in the first part or commonly spoken of as the first one-third of systole, while the second sound occurs at the first part of diastole. The first pause is between first one third and last part of last third of systole while the second or the long pause is diastolic in time.

The first sound and its cause is a matter of dispute, but it is generally supposed, to put it simply, that the vibrations of the walls of the cavity, that is, muscle, valves and even the aorta and pulmonary artery add their share to the contribution of the waves or oscillations, which in turn cause the sound.

The second sound is due to the closure of the pulmonary and aortic semilunar valves. While I do not believe this has even been absolutely confirmed yet, I think it is generally conceded that this is a fact and has so been universally accepted. If you will for a minute recall too the sounds are not heard well over their exact anatomical sites and are projected or transmitted to several situations which have been generally accepted as the most convenient points to observe them. If we will refresh our memories we will recall

1. The mitral area is at the apex.
2. The second left intercostal space the pulmonary valves.
3. In the second right is the aortic area.
4. Tricuspid area where 5th rib joins sternum.

The pulmonary and tricuspid areas are anatomically situated. The aortic and mitral areas are removed from their

respective and anatomical sites. The apex is used because the right ventricle is in front of the real mitral valve. At the apex and tricuspid areas the first sound being near produced is best heard and the second propagated from the semilunar above, while at the aortic and pulmonary areas the reverse is true. Frequently the detection of changes in the closeness or clicks of these sounds are as important as anything we possess, but like X-Ray interpretations it can be a matter of practice only. Defective action of the ventricle or alterations of the valves entire soften or obliterate the first sound. On the other hand the hardened mitral stenosis can accentuate it. Second sounds are enfeebled, due to alterations in the structures themselves or to a diminished tension in the aorta or pulmonary artery (anaemia, insufficiency.)

The second accentuates whenever tension is increased. In the aortic, a syphilitic hardening or a sclerosis. The pulmonic second accentuates on increased pressure in the lungs, etc. To me the detection of which has not been easy and I confess that many times I have been utterly unable to make any deductions.

What then, is a murmur? Is it a matter of duration of the sound—a murmur being prolonged or is it a matter of one, the normal, being a click while the other is a prolonged clang or even a purring. I confess that when I read what produces a murmur I feel like Omar Khayam did when he said:

"Myself when young did eagerly frequent
Doctor and Saint and heard great argument
About it and about, but evermore
Came out by the same door wherein I went."

Now as to the timing—anything before the short pause is systolic and anything happening from the beginning of the second sound to the end of the long pause is diastolic. This sounds so very easy as one writes it that it seems as if the detection of murmurs as to time should be easy, but there are as many doctors not speaking to each other over a difference of opinion as to the time of a murmur as there are over which was the first in a cardio renal breakdown—heart or kidney.

As a matter of fact, until very lately the term pre-systolic was a matter of some doubt as to its meaning and I always suspicioned that some men used it when they were called in on a heated argument and wanted to decide differently. They now use these terms—protosystolic, mesosystolic, telesystolic and protodiastolic, mesodiastolic, telediastolic. This makes the man who formerly used the term presystolic tell whether he means at the end of diastole or the beginning of systole. He formerly would not tell just which he meant very often and simply told you it was not diastolic or systolic.

The propagation of a murmur is assumed to follow the direction of the current that it occurs in or produces it and this again renders their correct detection a matter of such fine distinctions that it is well nigh impossible for the average medical man to correctly gauge it. Furthermore, the intensity of a murmur may be affected by two conditions at once opposite in quite the same way, which again greatly complicates matters. For instance, a small mitral valve may make a protosystolic murmur disappear, so will also a stretching of this value allow the same thing. The loudness, too, is no gauge as a hard valve may make a good loud click or purring, while a soft one just freshly infected may make scarcely any murmur at all.

Murmurs are organic, due to organic disease of heart itself or functional due to errors in the organ as it functionates as to the ring of valves or to an anaemia or rapidity of blood transmission in fevers or to other things to which no good explanation can be attached.

One can go ahead and time the flow so as to locate aortic or pulmonary trouble and as to whether the murmur in them is due to an insufficiency when it is stated as diastolic, insomuch as the blood must be coming back in diastole or if a stenosis, systolic, as it is pouring through them or is trying to pour through them in systole. While the mitral or tricuspid are in the matter of murmurs systolic in an insufficiency as the blood pours back as the ventricles squeeze together, while it must be diastolic in time if a stenosis, as the blood is then pouring into them.

But I am unable to see save as it might serve to aid you in a prognosis (some of these lesions being worse than others—perhaps—) what great end can be served after you have finally sifted out these murmurs as to their time. It has been assumed that diastolic murmurs are as a matter of experience more grave and serious than systolic. I have never been able to verify this and so cannot say. So then we have the times of the murmurs and their intensities very often a matter of very fine analysis and about the time we build fine systems of diagnostic advice on their interpretation we hear of an autopsy or see it ourselves where the patient had a heart — failing in every particular—with no murmur at all.

Let us recall that the final end of the heart is to furnish a good circulation in the capillaries where the flow is slow and the resistance high. Tissues must be fed and nourished. A good heart muscle is in the final analysis the necessary and all important element. This heart must be good and efficient at work and at rest. Obviously if it is only good at rest, it is impaired and if not efficient then, it is in a bad way and this is true whether we have a murmur or not. The first great test of a heart is not so much is there a murmur as it is whether the man can perform his usual work. If he cannot do this, it matters not if he has a murmur or not, he must rest and if rest does not alleviate the difficulty remedial measures must help and this again whether there is a murmur or not. On the other hand, if he has a murmur and does his work totally unaware of it, then he is really not an invalid and should so be treated. It is as we know, hard for a person with a lesion to give up and this may sometimes lead us astray but it cannot for long. There are short and long winded people who are normally that way, but as a usual thing a person who suddenly detects he is becoming short winded had better see about his heart, whether he finds out he has a murmur or not. Because in most short winded people the diastole is being shortened and if the rest period is being shortened it stands to reason the heart is going to give out as obviously again it cannot stop. So that short winded people should be watched, murmur or no murmur.

Notwithstanding the wonderful things I have hinted at in the first part of this paper, which may be diagnosed in connection with the heart, it is highly probable that the lowly signs of breathlessness and fatigue and a patient's own description (providing, of course, it is not of the garrulous kind) of his sensations of giddiness, vertigo and tendency to not being up to par as well as the reflex sensations on the chest may in the end serve one more to keep him from being a confirmed heart case than the rather ostentatious exhibition of a stethoscope and

the waiting for the detection of a murmur which on not being heard may perhaps lull the hearer into a feeling all is well, when as a matter of fact all is not well.

A healthy heart can murmur and a healthy heart it may be can cause breathlessness, but any one who sees much of it knows that normal lack of breath and abnormal are quite different—while normal heart murmurs certainly do simulate abnormal ones closely and if they reach old age is about the only way to tell which is which.

When the circulation is impaired as the respiratory center is the most sensative, we have the breathlessness as a result and the detection of this is often just as important in preventing trouble as the detection of albumin in urine may save an eclampsia, whereas if one waited for a murmur one has really waited until damage exists and I can't help thinking a heart once damaged is never again the same heart.

I used to laugh at a man for saying he felt his own heart and knew it was not acting right. I no longer feel that way about it. While I know a lot of people say they are affected that way who really have a slight intercostal neuralgia, yet it is up to you and I to tell which is which and it must be admitted "feeling one's heart" is another early symptom which may aid you and I later to properly practice medicine in relation to the heart.

Next you can recall, too, the auriculoventricular bundle—the so-called peacemaker of the heart. You can recall too the sensitive spot at the upper portion of the great veins leading into the auricles and how the wave starts there and how other portions of the heart can become more sensitive than the usual one giving rise to other pulsations and when you think of these things you realize valves and their consequent murmurs are relatively not so important as many other things, for instance, tonicity of heart muscle and conditions of the ganglia. Recall the fixed points of the heart and how changes in these may throw the heart in false positions.

Then the nerves—inhibitory, accelerator or depressor and what they mean to us in their many pathological conditions. I honestly believe that the physiologists and the pharmacologists are so far behind in their investigations of these nerves that when they do find out what they mean murmurs will not be so often on our minds or tongues.

Pain from many nerves are lost sight of by us—those in the abdomen and down the upper arm. Angina pectoris, spoken of so easily and understood so little. Probably due to exhausted muscle, lack of tonicity, aortitis, or susceptibility of patient, and yet many anginas get well and stay well but like murmurs they sit in the seats of the mighty, and the mere mention of them cause hushed voices with many doctors as well as patients. Many of the nervous symptoms in some anginas and many valvular cases could be eliminated were it not for the awful predictions made by many practitioners to people as to what will happen if they do not at once almost resign themselves to being total invalids.

Just as it is with murmurs, so is it with blood pressure, and it may be the murmur comes from a condition necessarily maintained, as we have come to find that blood pressure is not by any means necessarily a bad thing.

Hastily, let us go back to the auriculoventricular bundle and we see why we have our heart block when fibers of it are destroyed or impaired. Extra sys-

toles are not necessarily pathologic. Auricular fibrillation when each individual fiber performs on its own behalf. Auricular flutter with a sclerosis of auricle. Pulsus alternans with a degenerated heart muscle. Hastily as I say, we refer to them, we at once come to the conclusion that the myocardium — little as it has been studied — is the important thing and endocarditis and pericarditis are to be regarded as secondary.

The heart itself is first and its valves and its coverings secondary. The valves do loom up in the post-mortem, but that is because they are easy to see—the original disease which caused it all has been eclipsed in the last phase and the post-mortem does not show it. The valves were in at the last but after all it was the whole mycodarium that was responsible.

Take a dilated heart, it was hardly the blood pressing out on the wall that caused it nor the incompetence of a valve that allowed pressure to bear upon it that caused it to dilate, but a thin wall of a myocardium, so thin that like an inner tube it blew up where it was weak and had the muscle, like the rubber, been uniform it would not have dilated.

When the writer examined for the draft he was greatly impressed by the men who had loud systolic murmurs, who had worked hard for years and yet who did not know they had them. Not one other sign. On the other hand you were forced to throw out men who sallow and pinched, had pairs of sounds at least uniform and good if muffled, and yet the general character of whose hearts were so poor that we rejected them. Because we could not point to a murmur several of these were passed on, but a little drilling speedily showed that they had breathlessness and irregularity and perhaps graphically an auricular flutter or a fibrillation and not having a heart reserve they went down in the training.

I am not here to discuss treatment, except to say I personally use Digitalis without reference to the kind of murmur or whether any is there or not. I believe the errors in the use of digitalis are in its exhibition and not in the character of the lesion to be treated. I have seen it contradicted in a mitral stenosis or in a high blood pressure—gave it—and obtained good results. I refuse to believe a good pharmacology has been worked out for it as yet and so—with a humble begging of this body's pardon I use it often empirically. I watch it and if possible send the patient to the hospital while I use it, especially the first time. So far I have had no cause to regret it. So that even here I do not feel I have to know the kind of murmur I have.

So practically I believe the value of murmurs are over estimated. It has been said that save for respiratory diseases it would have been better had there been no stethoscopes. This is a little farther than I would care to go. The writer believes we ought to detect the murmur, ascertain its time if we can, and have if possible the valves involved correctly located, but he does not believe this is the all important matter. The condition of the myocardium, the size of the heart, the patient's ability to stand up to his duties if at all, breathlessness and sensation he believes will show up a heart earlier than murmurs. In these days, early diagnosis is what we are after, so that relatively in prophylactic medicine, at least, he is inclined to place murmurs after the above in practical value in making diagnoses upon damaged hearts.

RECURRENCE OF INGUINAL HERNIA AFTER OPERATION.

By J. Ross Hunter,
Huntington, W. Va.

Read Before the W. Va. State Medical Assn., Clarksburg, May, 1919.

The percentage of hernia that recur after operation is difficult to determine. Those individuals who get bad results, frequently go elsewhere for a second operation or become discouraged and do not report to the surgeon who originally performed the operation. Some years ago, we began a systematic follow-up of all surgical patients, writing a letter both to the patient and to his family physician one year after his discharge. The responses to these letters were too scattering and too indefinite to be of value. We were convinced, however, that a larger percentage of our hernia were recurring than we had heretofore supposed. We found also, that the recurrences coming to us for a second operation had not usually been our patients previously and this simply means that our own recurrences were going elsewhere.

In seeking to establish blame for failure to cure, we must take cognizance of several factors. To quote from a personal letter of Murat Willis, "There is a class of subjects, especially elderly men who have poor muscle development about the groin. These are prone to recurrence, no matter who operates upon them. It is also true that a patient who has urinary obstruction, chronic cough or chronic constipation, is prone to recurrence." There has been a tendency, in recent years, to attach the whole blame for the incidence of hernia to a pre-formed sac. This was done to refute the argument of those who believe that trauma or straining produced it, and in seeking to emphasize this point, we believe too much relative importance has been attached to the presence of the congenital sac. Lax abdominal walls or deficient muscle covering is certainly an important factor, as any practical surgeon will testify. As a result of this undue emphasis on the congenital sac, there arose the natural conclusion that if the sac is completely removed hernia is cured. It is not our wish to lessen the importance which has rightly been placed on this feature of hernia operation, but rather to emphasize it and in doing so, to call attention to certain other factors in conjunction with it.

The radical cure of hernia was developed by Bassini and Halsted, working at the same time and independently. Their work was so thorough and so finished that after innumerable efforts to improve it, the operation is just about as they left it. From time to time, certain features of their work have received unusual emphasis or certain modifications have been developed, but in its essential features, it is unchanged. Ferguson's operation differs in that the cord is not transplanted (an excellent plan). Overlapping of Fassia has had considerable attention at times but except in cases of old men where lax walls, is probably of no special value.

Inquinal hernia is so prevalent and the anatomy is so constant that we should, as far as possible, standardize our technique, adopting what has been found uniformly good and discarding the non-essentials. If we are willing to learn the anatomy of the groin, and especially to distinguish direct from indirect forms and modify technique accordingly, and if we take special pains with Asepsis, the recurrence will be largely reduced.

What are the established principles on which there is general agreement?

First—Strict asepsis.

Second—Complete removal of sac.

Third—Suture of conjoined tendon without tension to Poupart's ligament with or without transplantation of the cord.

It is, of course, not necessary to take up the time of this section in any argument relating to Aseptic technique, except to remind you that infection usually means failure as in any plastic work. Catgut sutures give way promptly in presence of pus or tension incident to infection. Complete removal of the sac has always and properly been considered the first essential to cure. The sac should be followed up to the point where it widens into the abdominal cavity and where the vas turns downward into the pelvis. It is to be transfixed or closed with purse-string suture depending on its size. This step should be taken with great care since, if the suture does not hold, recurrence is almost certain. Small sacs ought to be removed complete; the distal part of large scrotal sacs may either be taken out or left.

The second principle in the cure of hernia is suture of the internal oblique muscle and conjoined tendon to Poupart's ligament. The needle should grasp a good bite and be attached to the shelf of Poupart's ligament without tension and without injury to the ileo-inguinal or ileo-hypogastric nerve. The cord may or may not be transplanted. In direct hernias, the best rule probably is to transplant so that the neck of the sac is as far as possible from the original weak point. In indirect hernia, it does not usually seem necessary to transplant the cord. Dr. Halsted has suggested reducing the size of the cord, especially if there are varicocities but warns against too great a reduction of the blood supply to the testicle if there has been much trauma.

Dr. Bloodgood, in a recent illuminating araticle, has called attention for the second time to the matter of recurrence at the lower angle of the wound. He believes we are not giving enough attention to defects in the conjoined tendon. With the canal open, insert a long narrow retractor under the internal oblique muscle and lift up, then trace the conjoined tendon down to the pubic bone. If the tendon is deficient or is inserted high into the rectus sheath, as often occurs in direct hernia, we have unquestionably found the principal cause of recurrence at this point. In such a case these defects must be repaired at the expense of the rectus muscle. Woolfer originally described a method of opening the rectus sheath and of suturing a segment of this muscle to Poupart's ligament, and Halsted has suggested an inverted flap from the rectus sheath. A combination of these methods can easily be done which has the advantage of additional strength.

It has not been possible to find out accurately the percentage of recurrences, for the reasons stated before. We are convinced, however, that the ratio is higher than is generally conceded. Coley believes that in direct hernias 10 or 15 per cent recur in his hands. If this is true in his work, what must be the result in average hands? The percentage of recurrences at or near the internal ring is not so large.

CONCLUSIONS

1. The principal point of recurrence after operations for inguinal hernia is at the lower angle and is probably due to anatomical defects. Many of which can be repaired.

2. Recurrences at or near the internal ring are probably due to incomplete removal of sac.

3. Infection may cause recurrence at any point.

THE MALINGERER.

By A. M. Fredlock,
Elkins, W. Va.

Read Before the Barbour-Randolph-Tucker County Medical Society, at Elkins, April 15th, 1919.

As I wrote our secretary when he asked me for a paper for this meeting, I will attempt the subject of Malinging as seen in the army and the Draft Boards. Of the latter a great many of you physicians have had some experience. I also told the secretary I would get some of this paper from Captain Kennedy F. Rupert's lecture at Camp Greenleaf.

It is the world-old story from the cradle up—man's inborn desire to dodge a bad job; but when a bad job arises, a strong man goes to it. Hence, it is only logical to find that among the intelligent and mentally and physically capable, malinging is rare.

It is found among the constitutionally inferior, the mentally deficient, the hysterical, the degenerate, the insane. In fact, all classes open to suggestion. The motive, save in rare cases due to anxiety to enlist, is the same to all: evasion of work, duty, punishment. Rarely it may be from pure cussedness.

As an examiner, as some of you were, we encountered all kinds of malingers. I think on our first examination seventy-five to eighty per cent of those called up for examination claimed various troubles. The principal ones were — weak back, rheumatism, deafness, heart disease; and I distinctly remember one who did not have convulsions, but just plain fits.

To know people is to know how the hysterical like to dwell on each symptom of their very unusual case; to know how the true malinger does not like to dwell on it at all. This very thing may set you on the right track at the beginning. Possessing these various kinds of knowledge, it is further necessary to use it. Hence, clear-eyed, accurate observation is needed. Observation should be both direct and indirect. The direct is employed under the patient's eye to investigate the inconsistency of the objective with the subjecive symptoms. You listen to his tale; you look, you ask yourself, "Do the symptoms tally?"

Equally valuable is the indirect. A man may come in with a spine so stiff that he would swear if he bent over his back would break in two, and if there was a quarter on the floor and you were not looking, he would get it quicker than one of us.

Another will tell you of a sore pain he always suffers in his heart. Now our knowledge of symptoms of angina pectoris makes one sick enough and scared enough to keep quiet.

We hear of them having painful joints, if he straightens out that joint. What does anatomy tell us? What does common sense and observation tell us? That a painful joint is a flexed joint, just as it tells us that a painful spine is a rigid one.

The malinger is likely to be surly. He is cautious in his statements; hesitates in answering questions; avoids definiteness as much as possible; prefers not to look you square in the face and seems constantly to be on his guard.

Epilepsy has been a prime favorite with malingers. The test of falsity of the claim may often be determined quick-

ly, but if in doubt wait for a subsequent attack. Sometimes the application of a little cold water suddenly where it will be most good is advisable. In doubtful cases, Urinalysis and the use of the optholmoscope must never be omitted. It is well to remember that simulated fits are likely to run at the same time of day. Neurosthenia is a fearful source of deception. Artificial oedema is produced by leaving an elastic band on the member during the night. This can be detected by the mark left where the band had been on, if one has in mind and looks for it.

PERSISTENT HYALOID ARTERY

By T. E. Perry, M. D.,
Bluefield, W. Va.

Read Before Mercer County Medical Society.

Mrs. M. H., of Dan, West Virginia, was referred to me on February 11th, 1920, by her family physician, Dr. L. L. Cramer, for an examination of eyes.

Mrs. H. was born at Height, Buchanan County, Virginia, thirty-four years ago, and was married at eighteen years of age. Since that time she has given birth to seven children, none of them going to full term, but were born at seven, or eight months. One child lived one day, one child lived two days and one lived seven months when it died of spinal meningitis. The remaining four are well and strong. The youngest child is now fourteen months old. This patient gives a history of having been operated for appendicitis at the Welch Hospital about ten and one-half years ago. She has had a case of diphtheria, one of pneumonia, two of influenza and two of gall stones about one year ago. Her attack of pneumonia did not follow influenza.

The patient claims that she has had weak eyes since recovering from the second attack of influenza last October, and states that she has frequent attacks of sick headache lasting from three to twelve hours each time. She also complains of pain and dimness of vision in the right eye.

On examination of her eyes with an ophthalmoscope, I found the cornea, media and fundus clear. In the vitreous, I found a small, thread-like body, which was firmly attached to the posterior capsule of the lens by three distinct hooklets. There was a distinct enlargement of this body at the point of attachment to the lens, which greatly resembled the head of a parasite. The body was about the same size all the way back, tapering very slightly toward the fundus. I was unable to make out any attachment posteriorly. There was a distinct wave-like movement of this body, consequently I first came to the conclusion that it was a parasite, alive, and resembling the Filaria Sanguinis Hominis, or larval stage of the Filaria Bancrofti, more than any other parasite. It did not in any way resemble the cysticercus, or hydatid, the other two parasites which have been occasionally reported found in the vitreous.

In testing out this lady's vision, I found it to be 20-40 in the right eye, which was brought up to 20-30 with a plus 0.50 sphere. In the left eye, the vision was 20-30, brought up to 20-20 with a plus 0.25 sphere combined with a plus 0.25 cylinder axis 75. I prescribed the correcting lenses and allowed the patient to return home with instructions to wear her glasses and report to me again in one month.

All the authorities state that when there is a parasite in the vitreous, sight is always impaired, and that if the parasite is not removed, the sight will be lost and the eyeball will undergo atrophic changes. Fox, of Philadelphia, reports having seen one while in Vienna which came under the observation of Professor Arlt and that an attempt was made to remove it which was unsuccessful. He states that the parasite was white, or of a bluish color, and that its movement could be readily seen with an ophthalmoscope. I considered the only wise thing to be done in this case was to wait and watch any developments which might take place.

This patient returnjed to me on March 21st, at which time, I found no cloudiness of the vitreous and no change in the general condition of the eye. The only change noted was that the body seemed attached to the posterior capsule of the lens by only two hooklets instead of by three as formerly. There had been some provement in her vision and she reported that her attacks of headache had been less frequent. I again allowed her to return home with instructions to report to me in another month.

She returned today, April 20th, and I found the same condition as on the former visit.

I have examined all accessible literature on this subject as carefully as possible, and from the fact that her vision remains the same as when I first saw her, and the structures of her eye remain normal, I have come to the conclusion that, instead of this body being a parasite as I first thought, it is evidently a persistent hyaloid artery, with its attachment to the posterior lens.

De Schweinitz says that during fetal life, the vitreous humor is traversed by the hyaloid artery, which is an extension of the central artery of the retina and proceeds from the optic nerve to the posterior surface of the lens. The vessel passes through a channel, having a delicate membranous lining, known as the canal of Cloquet. Obliteration sometimes fails, and the most important congenital anomaly of the vitreous is evident—namely, the persistence of some vestige of the hyaloid artery. He gives the following classification:

(1) A rudimentary strand attached to the disc.

(2) A strand attached to the disc and a vestige also at the posterior surface of the lens.

(3) A strand passing from the disc to the lens.

(4) A similar strand containing blood.

(5) A strand attached to the lens above.

(6) A persistent canal (Canal of Cloquet) without any remnant of the vessel.

Fox says that the hyaloid artery usually disappears by absorption during the latter part of the fetal life, but that in some extremely rare cases, remains of this artery in the vitreous have been traced by the careful use of the ophthalmoscope, either in the form of a short, dark stripe, or of a dark thread running through the vitreous.

Liebnich reported a case in which there existed a physiogical cupping of the optic nerve together with a persistent hyaloid artery, the latter being distinctly traced up to the point of origin, the central artery of the retina. Fox also states that a case came under the observation of his Assistant, Dr. F. K. Brown, in which the hyaloid artery took the form of a venous twig running, with a slight bend,

some distance into the vitreous, then making a loop and returning and twisting itself three times around its base like the tendril of a grapevine.

TREATMENT FOR SOME OF THE EMERGENCIES IN OBSTETRICS. ASPHYXIATED INFANT, POST-PARTUM HEMORRHAGE, PLACENTA PREVIA AND ECLAMPSIA.

By L. J. Lanich,
Coketon, W. Va.

Read Before the B.-R.-T. County Medical Society, October 8th, 1919, at Thomas, W. Va.

In this article it is the purpose to give only the emergency treatment for the above emergencies, and that not in detail, as the article would be too voluminous.

The writer has always held that the ordinary, common, every-day general practitioner, in which class he is proud to place himself, and also the trained nurse, should know more about "Obstetrics" than any other branch of medicine. In other emergencies the physician has time to get assistance to share his responsibilities, and even to read up on the case, but not so in the emergencies of obstetrics, for when you meet them, and meet them you will if you have any obstetrical practice, it will be right up to you, not some one else, to handle the case skillfully or unskillfully, and to handle them skillfully you must know what you are going to do before you have the emergency, not learn it after you are in the case, as you must act quickly—there is no time to consult a text book and often you cannot get a consultant before it is too late. By making thorough examination before labor, and after it has started, you may be able to detect what will be an emergency, and prevent an emergency.

ASPHYXIATED INFANT

As treatment of Asphyxiated Infant deals only with the infant, it is probably not considered as serious as the others, but it is very important to know exactly what to do to resuscitate an asphyxiated infant. Three principles should govern the treatment. First—clear air passage from obstructions; second — maintain body heat; third—supply oxygen to the blood. The mouth and nostrils should be cleansed of mucous, etc., as soon as the infant's head is delivered; as soon as the body is delivered the infant should be raised by the ankles. This allows the fluid in the upper air passages a chance to run out before the child gets a chance to draw it into the lungs with the first gasp for air, and it is dangerous to perform artificial respiration when the Trachea, Bronchi, and sometimes the Alveoli are full of amniotic fluid, meconium, blood or vaginal secretions. This must be remedied before an attempt is made to bring air into the lungs. The importance of keeping the baby warm is not generally appreciated. The baby should be received in warm towels and kept wrapped up as much as possible during subsequent manipulations.

I do not take much stock in the common practice of putting the baby first in a cold basin of water and then a hot one. The one is too much of a shock—the other too exhausting. Sprinkling with cold water or a slap is preferable, and you will likely get as good results without the dangers of the former method. If the fluid has not all run out of the upper air passages, the use of the tracheal catheter can now be used to good advantage for getting out the fluid by passing it into

the trachea and sucking the fluid out and afterwards by inflating the lungs with it. The most important way to get oxygen into the blood is by artificial respiration by one of the various plans that have been suggested; probably the most powerful, and under some circumstances the most dangerous method, is that of Schultze swingings. "The child is grasped with thumbs over the front of the chest, index fingers on each axilla to prevent it from flying out of the operator's grasp, the three fingers of each hand distributed over the back; the head is held steady by a pressure with the wrists; the accoucheur stands planting the feet wide apart; the child is slowly swung up over the head, so that the feet fall downward and thus held for a few seconds. This is expiration, and often foreign bodies are emptied from the air passage. An assistant removes this with the little finger wrapped in gauze. Now the child is swung out farther and down between the legs, letting the motion begin and end very even and gently. An audible inspiration should accompany this movement."

It is well to alternate between the artificial respiration and in inflating the lungs either by mouth to mouth or trachael catheter. The baby should be given sometime for rest, and should be warmly wrapped. One thing that I have gotten splendid results from is by putting Spirits of Camphor in the hollow of the hand and applying to the fontenells; it acts both as a counter-irritant and as a quick stimulant. If the baby begins to breathe very weakly, and appears exhausted, give it a few drops of brandy or aromatic spirits of ammonia.

POST-PARTUM HEMORRHAGE

By far the most important treatment for Post-Partum Hemorrhage is "prevention," but that phase of the treatment will not be taken up in this article, as it is not an emergency. However carefully we may practice "prevention," we will have some cases of Post-Partum Hemorrhage. When we do have a case, the first thing to do is to find out the site of the Hemorrhage—is it a placental site or is in from lacerations. If it is the latter, contraction of the uterus will not control it, if it is not in the uterus. If the Hemorrhage keeps up afer the uterus contracts, hunt for the lacerations and suture them up. The first treatment for Post-Partum Hemorrhage is to grasp the uterus through the abdominal walls and massage it vigorously; at the same time have the nurse give the patient a hyperdermic of some sterile form of ergot, or if this cannot be had, give one dram of egertole by mouth. As a rule as soon as the uterus contracts, the hemorrhage ceases. Should the bleeding continue, it is necessary to remove the Placenta, if it has not already been delivered, whether or not a tear is found. After having massaged the womb vigorously, in the moment of contraction, perform Crede's expression. If this does not deliver the Placenta, after thorough trial, it should be done manually. The patient is put across the bed, the buttox well over the edge, the legs are held in a lithotomy position; the accoucheur sees that his instruments, basins with antiseptic solutions, gauze for packing the uterus, and the intra-uterine douche are all prepared and within easy reach. As this is a dangerous operation, on account of infection, the accoucheur should be absolutely sterile, with sterile gown and gloves; the external genitalia should be scrubbed and disinfected, and it would be well for him to use a piece of sterile gauze on his gloved hand for cleansing out the uterus.

In cases where the Placenta has been delivered and hemorrhage caused by the uterus not contracting, on account of either pieces of the Placenta or Blood Clot in the uterus, the uterus should be emptied of these particles and douched out with a hot, sterile douche. I prefer to use the rubber tube instead of the nozzle. If the douche does not stop the hemorrhage, after the uterus has been thoroughly cleansed, it would be well to use small pieces of ice, that have been in sterile water, placing these in the uterus by the hand, and then packing the uterus with sterile gauze, beginning, of course, at the Fundus and packing well. Stimulate the patient as may be needed in any case of shock, using normal salt solution, either by hyperdomoclisis or directly into the vein; camphorated oil, adrenalin, digifolin, etc. Do not give morphia or anesthetic; elevate the foot of the bed—some advantage may be derived from strapping the lower extremities.

PLACENTA PREVIA

The treatment will depend largely upon the location of the placenta, whether it is centralis, that is, the placenta attached as over os-uteri, commonly called marginalis, or to the side of the uterus, which we call lataralis; also as to whether labor has already advanced, and the amount of hemorrhage the patient is having. If the hemorrhage is not great, it will be far better to get the patient into a hospital. At any rate, the accoucheur should have one good assistant physician, and two trained nurses, if possible. During labor our first object is to stop the hemorrhage, and the second, emptying the uterus.

There are three ways by which the uterus can be emptied—the first—Cesarean Section; the second — bringing on labor by the aid of rubber bags, distended by water to dilate the cervix; the third—by rapid dilatation, and delivering the Foetus by Podalic Version. Cesarean Section raises the mortality for the mother, but lowers it for the Foetus. However, if there has been much hemorrhage, or trauma, Cesarean Section should not be considered, and only under the most favorable conditions, and where extenuating circumstances exist, should it be done. As to the use of rubber bags for dilatation of the cervix and controlling hemorrhage, I am not favorably impressed; it does not always control the hemorrhage—you cannot tell if the patient is slowly bleeding inside the uterus, and often it does not dilate the cervix, and after using the above method for hours, and the patient has been weakened by loss of blood, finally the uterus has to be emptied by the rapid method. If possible get the patient on a table, if you cannot get her to a proper operating room. If the hemorrhage is bad, rapid dilatation will have to be done at the home, but it is best to put the patient on a table, an ordinary kitchen table will do. Cleanse and shave the parts as for any vaginal operation; have patient completely anaesthetized. This, I think, is often the cause of lacerations and shock to the patient, because this important detail is not carried out. The legs should be flexed upon the abdomen. It is scarcely necessary to mention the importance of being absolutely sterile, as the accoucheur is attempting to do a far more dangerous operation from infection, than a laparatomy. He should have taken all the precaution to prepare the stimulants that have been suggested to be used in Post-Partum Hemorrhage. After the patient has been anaesthetized, and after finding whether the Placenta is attached, he should go into the cervix so as to disturb the placenta as little as possible; first, dilate the cervix fully, if

the hemorrhage is not too great to prevent dilatation. The dilatation should be made by the hand, this being the best instrument that has ever been invented for rapid dilatation of the cervix, though the dilatation may be started by rapid dilator. After dilatation has been completed, the hand should go inside of the uterus when the bag of water is ruptured, and if possible, get both feet. If only one can be gotten, bring it down outside of the vagina and lasso it with a sterile bandage lasso, then let it go back in the uterus, and by this time you can probably get both feet in one hand. Grasp them so that they will be brought down with the toes toward the hollow of the mother's sacrum. If at any time, while the hand is in the vagina, if one of the baby's hands is protruding, lasso it also, as it will be a great assistance in bringing down the hands, if they are above the head in "after coming head." The reason the feet should be brought down with the toes turned toward the mother's sacrum is, that this makes the baby's chin rotate so that it is in the hollow of the sacrum, which makes the head much easier to deliver. As soon as the feet are delivered, the extremities and body should be kept covered with a warm, dry towel to prevent the baby from trying to breathe before the head is delivered. Some advise to only bring the foetus down until the buttox is down on the perineum, and allow Nature to take its course. They claim that this does not exhaust the mother as much as completing the delivery, but I do not think so. The danger of hemorrhage is not over until the Foetus is born, and the Placenta delivered, and the uterus contracted. The dangerous part of it to the mother is in turning the child, and not in delivering the after coming head, but all of it should be done while the mother is anaesthetized and the quicker it is over the better it is for the mother, and certainly for the child, provided, of course, it is done in the proper way. Traction should be made carefully and not by jerks, and should be made in the right line; ten pounds of Traction in the wrong direction may do more harm than one hundred and fifty pounds in the right direction and in the right way. It will take some time to deliver the arms, especially if they are over the head, and if you have a lasso over one hand it will be of great assistance in delivering the first one, and the second arm is much easier to deliver than the first. Be sure not to make Traction upon the body until both arms are delivered. It should take about four minutes to deliver the arms and from two to four minutes to deliver the after coming head. The head should be delivered by putting two fingers in the mouth, which should have rolled to the hollow of the sacrum. Traction should be made in this way on the lower jaw with the body of the child resting upon the arm that is in the vagina — the other hand like a "Y" across the neck; gentle traction in this way should be made, remembering the curvature of the vaginal canal. At the same time the assistant should make pressure above the mother's pubic bones, on the after coming head. This will be of great assistance. I think the rapid delivery is far preferable to the slow method, and I cannot agree with those that think it causes great shock to the mother. There is danger of ruptured uterus or lacerating the cervix, but not near as much if the mother is well anaesthetized. There is more danger if the bag of water has ruptured, and the foetus is well down in the pelvis before the operation is begun.

ECLAMPSIA

The mortality in Eclampsia is still from 20 to 45 per cent for the mother and 30 to 60 per cent for the child. Such high mortalities rarely accompany surgical complications, hence the patient deserves as much, if not more, consideration, than does the surgical patient. She deserves at least two good physicians, two trained nurses, and, if possible, hospital facilities, and since now every locality has automobiles, and as a usual thing the roads are so that they can be traversed any time of the year, it is only a matter of one or two hours until a patient from any locality can be gotten into some hospital. There are three general plans of treatment — two extremes and one occupying the middle position. Duhrensen's Dictum is, after the first convulsion, put the patient in a deep sleep and deliver at once. The other extreme is to put the patient to bed, give her narcotics, such as chloral, morphine, using stimulants, bleeding, etc., and await the natural termination of pregnancy and labor. Those accoucheurs, occupying the middle position, use medical treatment more or less and hasten the labor, if the patient's condition is evidently going from bad to worse. Experience is accummulating to prove that the rapid emptying of the uterus, with the ,patient thoroughly anaesthetized after the first convulsion, gives the best results. Peterson collecting 615 cases of early delivery, as soon as possible after the first convulsion, finds the mortality 15 9-10 per cent and compares this with the same mortalities of 28 9-10 per cent of the same maternities, under so-called conservative treatment. Another table shows 4 per cent and 31 per cent respectively. R. Freund reports 551 cases of "eclampsia" from the Berlin Charite, which were delivered within an hour, with no deaths. The method of delivery should depend largely upon the advancement of labor. If labor is advanced so that the cervix is dilated and the head engaged, forceps should be applied and the foetus delivered while the mother is under anaesthesia. This, of course, could be done immediately, and at the patient's home, but otherwise the patient should be removed, as suggested, to a hospital. As Cesarean Section still shows a very high mortality, it is far preferable to dilate the cervix by either the rapid dilatation, or by the use of a rubber bag, distended by water. I do not think that where the mother has had a genuine convulsion, that the slower method is at all feasible, but think that the rapid dilatation, under the same plan as suggested in Placenta Previa, is far safer. I hope no one will construe what I have said in regard to rapid dilatation of the cervix, or podalic version, as being slight operations. They should not be employed unless there is a pathological condition, justifying their use.

In conclusion, it has not been my purpose to bring you any new or easy plan for handling these emergencies, but rather to impress upon the general practitioner that he should have some definite plan for treating these cases. I have endeavored to show how I have cared for them, but do not claim my way to be the only or most scientific one, but I claim that I have successfully put them into practice, and this is what I think every physician who is going to practice "obstetrics" should do—is to have his plans well matured, that he can put into practice not only in the four emergencies that I have called to your attention, but to all other emergencies in "obsterics." Nothing should so appeal to the general practitioner. Are not the mothers and new born babies the mainstay and hope

of the home, and is it not in obedience to the first Divine Command given to us to "be fruitful and multiply, and replenish the Earth and subdue it," that the mother is in this condition? And is it not on account of confidence in your skill that you have been engaged to attend her? Therefore, should we not merit the confidence that has been placed in us.

Announcements and Communications

The following letter explains why the proofs from reports published in Surgery, Gynecology and Obstetrics are used in our Journal.

They are very interesting and will be completed.—Ed.

Editor, West Virginia Medical Journal,
Huntington, West Virginia.

Dear Sir:

I believe you will find something of interest to your readers in the enclosed proofs containing a further report of the visit to the South American surgeons by Dr. William J. Mayo and myself on behalf of the American College of Surgeons.

Additional details of the work being done in the hospital standardization campaign are also included.

This material is released for publication May 1, 1920.

Yours very truly,
Franklin H. Martin,
Secretary General.

SOUTH AMERICAN SURGEONS

Theodore Roosevelt, with characteristic courage and vigor, overcame all opposition and caused the Panama Canal to be built. The dream of nearly five centuries was realized. The whole world is forever Roosevelt's debtor. By the severance of the land connection between North and South America these two continents are now united as never before. The long, hazardous routes of travel of the olden time have been replaced by new ones, safe and speedy. The great war came so quickly after the completion of this epoch-marking achievement that it has not as yet touched Pan-American imagination.

Having returned recently from a trip to South America where, in company with Dr. Franklin H. Martin, I visited some of the important surgical clinics of Peru, Chile, Argentine, and Uruguay, where we became acquainted with and observed the methods of many surgeons, I take this early opportunity to pay merited homage to these men of science, learned in surgery. It is but just to say that in their hospitals and operating rooms they are the equal of any representative group from any country in the world. They have that intuitive clarity of thought and facile mastery of technique which we associate, and rightly, with the French and Italian schools. The surgeons of South America have recognized for a long time the necessity of frequent clinical trips to observe the work of foreign surgeons; of late years many of them have come to the United States; it has been always a pleasure to know them.

Their medical schools are splendid institutions with a seven year course, and are the equal in equipment and methods of theoretic teaching of any in the world. In South America "Commencement Day" means just that, for after graduation the young surgeon begins a special course of surgical

training. Instead of carving his way to knowledge and experience by the scalpel, he is tutored for a period of from eight to ten years along lines which we of the United States have accepted only recently under the general term of fellowships in graduate medicine and surgery.

The hospitals of South America are imposing, built for the tropics, and associated with the medical schools. The hospital records are the best I have ever seen this is true of every hospital we visited, small or large.

The reception given us by our South American confreres was most cordial, and we came away with not only admiration for the South American surgeon as a surgeon, but also with a feeling of personal friendship for him that will last for life. Whatever may be the after-war responsibility of the United States abroad, we can not question that our first duty is to develop a sound Pan-Americanism.

A Pan-Americanism of science, a unity of the spirit and ideals, will be more lasting than measures based on financial, commercial, or political considerations.

WILLIAM J. MAYO.

SOUTH AMERICAN SURGEONS

A Trip in Behalf of the American College of Surgeons by Dr. William J. Mayo, President, and Dr. Franklin H. Martin, Secretary-General. Jottings of the Secretary-General—Continued.

By Franklin H. Martin, M. D., F. A. C. S.

I. ACTUAL SURGERY

"What about the surgery you witnessed?" This is the question most frequently asked. Unfortunately, we had but one or two opportunities to see the surgeons at work. One morning, in the course of hospital inspection, we saw three operators at work in as many institutions. The first surgeon was operating on an ectopic pregnancy, in which a primary rupture had occurred, and the patient was exhausted by the serious haemorrhage. The operation was skillfully performed. In another operation room the surgeon was doing a careful dissection on a strangulated inguinal hernia, under a local anaesthetic. An eight-inch, gangrenous intestine was revealed. The operation was ably managed under surroundings that were perfectly safe, although the operator was undoubtedly surprised at finding himself the observed of the premier surgeon. In a neighboring hospital we witnessed an appendectomy. A gangrenous appendix was removed in the routine way. The morning's observation revealed surgery equal to that of the best hospitals of New York City, Chicago, and Rochester.

In other cities we witnessed parts of procedures, and in each instance the surgery was apparently of the highest class. I am quite sure that Lima, Santiago, Valparaiso, Buenos Aires, or Montevideo could entertain a surgical society of the United States or Europe and give a surgical demonstration that would reveal a broad experience, approved facilities for diagnosis, recognized technical ability, and a fundamental knowledge of surgery that could not be excelled anywhere.

II. PANAMA

It is now well recognized that the Panama Canal could not have been

completed if it had not been for the sanitary regulations that were devised and enforced in connection with the work of digging and constructing. The Medical Corps of the United States Army was responsible for this accomplishment. This Corps, through the self sacrifice of its members, revealed the course of malaria and yellow fever, and discovered and applied the remedy. The miracle of the completion of the Panama Canal could not have been attributable to Theodore Roosevelt alone even if it had been necessary to occupy much more territory; nor to General Goethals alone even if the Culebra slides had been multiplied ten times; but to that lovable man who, with his associates of the Medical Corps of the Army, applied the rules of modern sanitation, rules based on ministrative regulations formulated by this same great scientist, Major General William C. Gorgas.

III. MAJOR GENERAL WILLIAM C. GORGAS, M. C., U. S. A., RETIRED

One does not wonder that General Gorgas loves the beautiful spot that his genius made possible, and that he saw rise from a tropical jungle of pestilence to a paradise for men—the destined garden spot of the world.

Once while General Gorgas and the writer were waiting for an interview in the office of the Secretary of War, we spoke of the horrors of the war inn which we were both so busily engaged. I remarked to the General that it must seem to him that fate had pursued him pretty closely; after all the work he had done in sanitation to be suddenly called upon to raise an army of civilian doctors for the greatest war of history. "Yes," he said, "I wish the horrible war were over." I said, "What is the very first thing that you would do, General Gorgas, if tomorrow morning, before arising, you should receive a telephone message assuring you that the war was ended?" "Do you know what I would do?" he asked, while his eyes had a far-away, wistful expression. "I would ring off, call New York City, and order a passage for South America. I would go to Guayaquil, Ecuador, the only place in which yellow fever is prevalent, exterminate the pestilence, and then—and then return to Panama, the garden spot of the world, and end my days writing an elegy on yellow fever."

And this was not the mere daydreaming of a man overwhelmed by a stupendous job, but the real yearning of a peace-loving man, who, within a month after the armistice, accepted a commission from the Rockefeller Foundation to go to Guayaquil, Ecuador, to do the very job that he wished to do.

While Dr. Mayo and I were visiting the President of the Republic of Peru, he spoke affectionately of General Gorgas and said that three of the South American Republics—Peru, Ecuador, and I believe Colombia—had appointed General Gorgas the official Inspector-General of Sanitation for the western coast. Unfortunately, we missed General Gorgas at Panama, as he was on his way south and we had passed each other en route without realizing it.

(To be Continued in the July Issue).

UNITED STATES CIVIL SERVICE EXAMINATION BACTERIOLOGIST

June 22, 1920.

The United States Civil Service Commission announces an open competitive examination for bacteriologist. A vacancy at St. Elizabeths Hospital, Washington, D. C., at $2,500 a year, with temporary increase granted by Congress of $20 a month, and maintenance, and vacancies in positions requiring similar qualifications, at this or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles. For the present vacancy male eligibles are desired.

Competitors will not be required to report for examination at any place but will be rated on the following subjects, which will have the relative weights indicated on a scale of 100: (1) Physical ability, 10, (2) Education, training and experience, 90.

Under the second subject competitors will be rated upon the sworn statements in their applications and corroborative evidence.

Applicants must have graduated from a recognized medical college, and have had at least five years' bacteriologic and sanitary experience, including experience in the following lines: (a) Performance of autopsies; (b) Wasserman work; (c) Urinalysis; (d) Blood counts; (e) Sputum examination.

Special credit will be given for graduate courses in bacteriology, pathology and general sanitary work in the U. S. Army or in domestic or foreign universities; also for experience in similar work in a hospital for the insane.

Applicants must have reached their twenty-sixth birthday on the date of the examination. Age limits do not apply to persons entitled to preference because of military or naval service.

Applicants must submit with their applications their unmounted photographs, taken within two years, with their names written thereon. Proofs or group photographs will not be accepted. Photographs will not be returned to applicants.

Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Secretary of the Fourth Civil Service District, 8th and E Streets, N. W., Washington, D. C., or to the Secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La. Post Office, Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Calif., or Old Customhouse, St. Louis, Mo.

Applications should be properly executed, excluding the county officer's certificate, but including the medical certificate, and must be filed with the Secretary of the Fourth Civil Service District, 8th and E Street., N. W., Washington, D. C., prior to the hour of closing business on June 22, 1920.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., June, 1920.

THE JOURNAL issued on the first of each month. Entered as second-class matter, January 1, 1916. Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917. Authorized July 24, 1918.

Subscription - - - - - - - $2.00 per year
Single Copies - - - - - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—H. R. Johnson, Fairmont.

FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

SECOND VICE-PRESIDENT—W. E. Vest, Huntington.

THIRD VICE-PRESIDENT—Joseph L. Miller, Thomas.

SECRETARY—J. Howard Anderson, Marytown.

TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

THE FIFTY-THIRD ANNUAL MEETING

Those who were present at Parkersburg for this meeting were more than repaid for the trip. The program as prepared led us to expect much. We were not in the least disappointed, for the addresses were of a very high standing, many of them alone being well worth the time spent in attending the three-day session.

There was not a single dull day, and everyone present seemd to be enthusiastic. This, of course, made the discussions one of the most valuable features of the scientific part of the meeing.

The members of the Little Kanawha and Ohio Vally Medical Society are to be heartily congratulated for the successful entertainment of the parent body. Their arrangements for the social features made us forget for a time the serious business of the meeting and then go back to it refreshed.

The following officers were elected for the ensuing year:

President—J. Howard Anderson, Marytown.

First Vice President—H. E. Gaynor, Parkersburg.

Second Vice President—S. G. Moore, Elkins.

Third Vice President—Charles O'Grady, Charleston.

Secretary—Robert A. Ashworth, Moundsville.

Treasurer—H. G. Nicholson, Charleston.

Councilors

First District—H. P. Linz, Wheeling.

Second District—C. H. Maxwell, Morgantown.

Third District—L. . Forman, Buckhannon.

Fourth District—W. S. Link, Parkersburg.

Fifth District—E. H. Thompson, Bluefield.

Sixth District—J. W. Moore, Charleston.

Delegates to A. M. A.—J. R. Bloss, Huntington; alternate, W. W. Golden, Elkins.

THE PRACTICE OF OBSTETRICS

That this field of work is important all will admit without discussion. There is no branch of our profession which is of greater importance and yet none so neglected by us as a whole. We find that each physician we meet will tell us that he dislikes Obstetrics and wishes he could get away from it and yet has to keep on with it. It is the exception which proves the rule.

We are wondering just how much real care and thought goes into the study of each case. Do we go into the prospective mother's habits of life; do we carefully watch her elimination from day to day; do we examine her carefully to see if there are departures from the normal which will give us abnormalities during the course of her labor.

True Pregnancy is a perfectly normal state and fortunately the vast majority of the mothers and children get through with it "after a fashion." If a number of women might be examined we feel sure that many, many physicians would hang their heads in shame over the end results of what they thought were perfectly normal deliveries. This reminds us of a physician of whom we have heard who boasted of so many hundreds of obstetric cases with no tears. He was not a man noted either for his gentleness or skill. The only "safe" conclusions are that he never examined his patients to see if they were torn, did not know a tear when he did see it or was an unmitigated associate of Ananias.

We would not do an appendectomy without having all the careful preparations of a modern hospital with our aseptic gauze and instruments and assistants. Yet we go into the home with maybe a few things in an old bag, possibly not even a nail brush or soap or an umbilical tie, with all the nonchalance of a master. We have our blood counts and urinalyses and what not made for the simplest of our surgical cases and rightly so; yet we make an occasional test of the urine, possibly one or two, of the parturient woman and feel we have done our duty. The contention is that it takes far better judgment, more pains—and vastly more skill when

emergencies do arise to see the parturient woman through gestation, delivery and convalescence, than does the average appendectomy or other surgical operation. The obstetrician must be conscientious in the performance of his duties if the future health and happiness of the woman is to be safe-guarded and if he is not willing to give the same careful attention to detail that he does to his other surgical work he should not claim the title of Obstetrician but that of "Granny." Still it seems that there is no branch of our profession in which the members are all such experts, unless it be as anesthetists. How fortunate for so many of us that our female patients are by fashion compelled to wear skirts that our neglect and ignorance and lack of skill may be concealed by these draperies!

Let us give a little time to thinking ourselves over in this respect and then give the very best that is in us. And charge as for any other major operation. Make yourself and your service worth more and you will have no trouble in getting larger fees.

IMPROVEMENT IN HOSPITAL SERVICE

Every state medical association in the United States has its part in the present universal movement for the betterment of hospital service. Every association now has its own committee which is studying the hospital situation in its state in cooperation with the Council on Medical Education of the American Medical Association. The Council has obtained, through reports, correspondence, and other methods, data relative to all hospitals in the country and each state committee has been supplied with the data relating to the institutions in its state. Through their closer familiarity with the hospitals, or by inspections the state committee is in excellent position to verify these data and to make a reliable report to their state association and to the Council.

For convenience and in order to secure uniformity of reports from the forty-eight committees regarding the relative efficiency of hospitals, blanks furnished by the Council call for a rating of all hospitals in classes A, B and C, grouped also according to the special class of patients cared for. This rating is not for publication but will aid the Council in the preparation of a list of hospitals which are considered worthy of approval. These lists are subject to frequent revision so that names of other hospitals can be included as soon as sufficient improvements are made to warrant their being approved. State committees are urged to promptly report to the Council any instances where such improvements have been made.

The purpose of the work is to aid the hospitals in providing for their patients the best possible service and in no way to injure those which are honestly endeavoring to provide such service. Toward this end, every possible assistance will be given to individual hospitals by the Council or by the local state committee in establishing such changes as will make them worthy of approval.

Forty-two state committees have reported progress in connection

with the latest survey and thirty-four have turned in reports regarding hospitals inspected and graded, which have more than half the entire bed capacity of all general hospitals in the country. Meanwhile, this work of the Council is not conflicting with, or duplicating the splendid work being done by the American College of Surgeons, the Catholic Hospital Association, the American Hospital Association or other agencies. In fact the work of each agency is evidently complementing that of the others.

At the New Orleans meeting, recently, the House of Delegates of the American Medical Association registered an intense interest in the improvement of hospital service and authoried the trustees to generously provide for that work. This work has been so intimately related to that of the Council on Medical Education that the name of this Council was changed to the "Council on Medical Education and Hospitals."

In brief, further enlargement of hospital work by the American Medical Association is assured and in this work each state is destined to have an important part. Toward this end each association is urged to make its hospital committee permanent and to retain on it those who will not only be active but who also can do the work in the most efficient and unbiased manner. Hospitals, at present, form the closest link between the medical profession and the public and the medical profession should do all it can to aid the hospitals to provide the very best service possible.

MEMBERS WHO HAVE PAID YOUR DUES

Write to the Editor if you fail to receive your copy of the Journal. This will save time and expense.

State News

Dr. Frank LeMoyne Hupp, of Wheeling, has accepted the Chairmanship of the Cancer Committee of West Virginia, and has sent in a list of ten division chairmen, which constitute the West Virginia Committee to the American Society for the Control of Cancer. This committee is as follows:

Dr. John E. Cannady, Charleston Division.

Dr. W. H. St. Clair, Bluefield Division.

Dr. Chester R. Ogden, Clarksburg Division.

Dr. W. W. Golden, Elkins Division.

Dr. Carter S. Fleming, Fairmont Division.

Dr. J. Ross Hunter, Huntington Division.

Dr. Charles S. Hoffman, Keyser Division.

Dr. John M. Simpson, Morgantown Division.

Dr. J. Howard Anderson, Marytown Division.

Dr. Mary V. McCune Rossa, Martinsburg Division (Shenendoah Valley Sanitarium).

Dr. J. J. Goodwill, of Cooper, W. Va., Major in the M. C., has received his honorable discharge from the service.

Dr. R. H. Boice, located at Sistersville before his service with the M. C. during the war, has moved to Parkersburg where he is connected with the City Hospital in the X-ray department.

Dr. G. B. Capito, of White Sulphur Springs, Captain in the M. C., has been honorably discharged from the service.

Dr. W. H. Young, who practised his profession at Sistersville for a number of years, has removed to Lexington, Ky., where he has oil interests. He attended the State Association at Parkersburg in May.

Dr. G. C. Howard, of Maysville, Ky., was a recent visitor in Huntington.

Dr. Hugh G. Nicholson, of Charleston, is enjoying a vacation in Florida where he is devoting most of his time with the "finny tribe", especially tarpon.

Dr. Herman L. Crary, of Huntington, has purchased an interest in the Home Nursing Hospital, located in that city.

Married in Huntington, Miss Ida M. Carsey, a nurse at the Kessler-Hatfield Hospital and Dr. H. F. Blais, chemist at the same institution.

BORN—To Dr. and Mrs. Herman L. Crary, of Huntington, on May 18th, a daughter.

Dr. C. L. Parks, formerly located at Middlebourne, is now at Salem.

Dr. W. H. Green has moved from Cameron to Weston.

Dr. L. V. Guthrie, Superintendent of the Huntington State Hospital, accompanied by Mrs. Guthrie, will attend the American Medico-Psychological Association at Cleveland, June 1st to 4th. Dr. Guthrie is Chairman of the Committee on Nursing and will be Moderator at the Round Table discussions of this section of the Association's activities.

The date of the annual meeting of the American Public Health Association at San Francisco has been changed from August 30 to September 13 to 17.

The Southern Medical Association will hold its annual meeting in Louisville, Ky., November 8 to 11. Dr. T. W. Moore, of Huntington, is a member of the Council of this Association.

Dr. S. R. Holroyd, Superintendent of the Spencer Hospital for the Insane, passed through Huntington recently from up the N. & W. R. R. where he had been called by the illness and death of his brother.

Among those who attended the recent meeting of the A. M. A. at New Orleans were Drs. A. A. Shawkey and J. E. Putney, of Charleston; C. R. Ogden, Clarksburg; H. P. Linz, Wheeling; T. W. Moore, Huntington, and A. P. Butt, Elkins.

Drs. J. E. King and Ben Witt Key, of New York City, addressed the Mercer County Medical Society at Bluefield in April.

The following well known physicians from "Out of the State" were present at the State Association meeting at Parkersburg and delivered addresses: A. J. McLaughlin, Ass't Surgeon General, U. S. P. H. S., Washington, D. C.; Curtis F. Burnam, Baltimore, Md.; Joseph E. King, New York; E. O. Smith, Cincinnati; Emil Novak, Baltimore, and Tom A. Williams, Washington, D. C.

Dr. Hubert Work, of Colorado was elected president of the A. M. A. at the meeting held in New Orleans. Boston was selected as the meeting place for the next session.

GOVERNMENT REGULATES USE OF HOT SPRINGS

The government is making complete regulations with reference to the use of hot waters prescribed by physicians at the Hot Springs, Ark., reservation. This is accomplished by a provision in the Sundry Civil Bill which has just passed the House of Representatives and gives the Secretary of the Interior authority to assess and collect reasonable charges from physicians for the exercise of the privilege of prescribing the mineral water at the reservation. The money received from the exercise of this authority will be used in the protection and improvement of the reservation. The purpose of this regulation is to permit only registered physicians to prescribe the waters; to prevent improper charges, and to maintain high medical standards.

MEDICAL WOMEN ELECT OFFICERS

At the annual meeting of the Medical Women's National Association held in New Orleans, April 26 and 27, the following officers were elected: President, Dr. Mary Elizabeth Bass, New Orleans; vice presidents, Drs. Grace W. Kimball, Poughkeepsie, N. Y.; M. Louise Hurrell, Rochester, N. Y., and Helena T. Ratterman, Cincinnati; recording secretary-treasurer, Dr. L. Rose H. Gantt, Spartanburg, S. C., and corresponding secretary, Dr. Isabelle T. Smart, New York.

GORGAS AND NOBLE SAIL FOR AFRICA

Last week Gen. W. C. Gorgas left for England, where he is to receive an honorary degree. He was accompanied by Brig-Gen. Robert E. Noble, who is on a six months' leave of absence. They will proceed to West Africa to study what is alleged to be an outbreak of yellow fever in that district.

MEDICAL VETERANS OF WORLD WAR MEET

At the annual meeting of the Medical Veterans of the World War, held in New Orleans, April 26, the following officers were elected: President, Dr. Frank Billings, Chicago; vice president, Admiral Edward R. Stitt, U. S. Navy; secretary-treasurer, Col. Frederick F. Russell, M. C., U. S. Army, Washington, D. C., and trustees, Drs. Hubert Work, Pueblo, Colo.; John M. Dodson, Chicago; George E. Brewer, New York; Joel E. Goldthwait, Boston; James C. Perry, Washington, D. C., and Col. Frank R. Keefer, M. C., U. S. Army, Washington, D. C.

Dr. S. L. Jepson, secretary of the West Virginia Public Health Council, reports the oral and written examination held at Charleston, Jan. 13, 1920. The examination covered 10 subjects and included 100 questions. An average of 80 per cent. was required to pass. Of the 12 candidates examined, 7, including 1 osteopath, passed and 5, including 1 undergraduate, failed. Ten candidates were licensed by reciprocity.

SALARIES OF PUBLIC HEALTH OFFICERS

At the suggestion of the Society of Medical Officers of Health and the British Medical Association, the medical journals of England have decided to reject all advertisements for assistant medical officers of health when the annual salary offered is less than £500, exclusive of traveling expenses. The agreement draws attention to the inadequate remuneration of physicians in the public service, for salaries in many cases have remained unchanged despite the increased cost of living.

ROENTGEN'S RETIREMENT

At the close of the winter semester this spring Professor Roentgen retired from his chair (experimental physics) at the University of Munich and resigned likewise the charge of the Physikalisches Institut. His discovery of the rays that bear his name was made at Wurzburg in 1895. Although not a physician, the profession can almost claim him on account of the way it has appropriated his discovery. He was born March 27, 1845.

A vocational school for veterans of the recent war may be established by the Federal Board for Vocational Education in any hospital where there are ex-service men in groups of sufficient numbers to justify the establishment of such a school.

With this idea in mind, an officer of the Public Health Service made a survey which took hospitals in the Soldiers' Homes at Dayton, O., Marion, Ind., Danville, Ill., and Milwaukee, Wis.; three Public Health Service hospitals—P. H. S. Hospital No. 30 and the Marine Hospital, both at Chicago, and P. H. S. Hospital, Markleton, Pa.; the private sanatorium at Catawba, Va., and the county hospital, "Healthwin," at South Bend, Ind.

Society Proceedings

The Mercer Medical Society met in Bluefield on April 20, 1920, with Dr. Ridley, vice president presiding until president StClair returned and took the chair. The minutes of the last meeting were read and adopted. Under clinical cases Dr. Hoge reported a very interesting heart case which was discussed by several members present. Drs. Vass and Kirk reported a case of Pellagra. Dr. T. E. Peery reported a case of Persistent Hyaloid Artery which was discussed and very interesting. Dr. Slusher agreed to give his pictures at the next meeting. The society was very fortunate in having with us Dr. Ben Witt Key and Dr. J. E. King of New York City, who both contributed very interesting papers and was freely discussed by the members present. The secretary hopes to obtain these papers in the near future and send them to

the Journal for publications. After the meeting the society was entertained by the ladies of the Episcopal Church who served a delightful luncheon.

Motion was then made to adjourn and meet May 27th, at Princeton.

UPSHUR COUNTY MEDICAL SOCIETY

The County Medical Society had a very successful meeting on May 6. Luncheon at the New Valley House after which the members assembled in the parlor. The following were present L. W. Page, J. B. Simons, L. H. Forman, W. H. Gumm, H. O. VanTromp, H. C. Cookman, J. L. Pifer, G. O. Brown, Oscar B. Beer. An interesting report was given by Dr. D. M. Lewis who has been conducting a Health Campaign in Upshur County, Dr. Lewis and his able assistant Miss McMahon were tendered a vote of thanks and appreciation by the Society for the very efficient work done by them. The Society went on record as favoring the continuation of the health work here and will use its influence in obtaining a permanent County Health Department with an all time Health Officer and Health Nurse. Dr. H. O. VanTromp was elected Delegate and Dr. W.. Gumm Alternate, to the State Convention. A resolution was passed favoring a State wide prosecution of the illegal practitioner and urging a greater effort on the part of the State Health Council in the enforcement of the Medical Practic law. The matter of fees for services rendered was taken up and discussed. It was agreed that the fees must be raised and a minimum rate of $2.50 for day and $4.00 for night calls was fixed for the city of Buckhannon and a minimum of $1.50 per mile for country calls. Office calls $1.00 to $5.00. Obstetrical, normal $15.00.

Oscar B. Beer, Sec'y.

Medicine

THE TREATMENT OF ACHYLIA GASTRICA

Horace W. Soper (Southern Medical Journal, May, 1919) says that while the Ewald-Boas test breakfast may be used as a routine measure, no diagnosis of achylia gastrica can be made without the use of the fractional method. If it has been demonstrated in this way that hydrochloric acid and the pepsin and rennin enzymes are absent throughout the entire phase of digestion, and that no stomach mucus is present, a diagnosis of simple, true achylia may be made. The diet must be arranged to protect not only the gastric, but also the intestinal mucous membrane. The cellulose and connective tissue, as well as the gelatinous envelope of the starch grain, cannot be digested without the presence of hydrochloric acid in the gastric contents, and it is impossible to supply this deficiency in achylia. Hence these foods must be prepared in such a way that they can be taken care of by the small intestine. Hydrochloric acid is administered as a stimulant to the digestive hormones. Soper prefers to give the dilute acid in fifteen to twenty drop doses, well diluted, and taken slowly after meals. Every effort must be made to improve the appetite and to formulate a diet that is high in calorie value. Fats must be emulsified; those contained in

meats, especially bacon, must be avoided. Butter and cream should be given freely. Starches must be finely comminuted. All meats should be boiled or broiled until they are thoroughly done, that the connective tissue may be gelatinized. Citric and lactic acids are powerful stimulants to pancreatic function, so fermented milk, orange juice, and grape fruit juice are important elements of the diet. Meat extracts should be given freely because of their stimulating effect upon the digestion and appetite. Careful and prolonged mastication will correct many errors in cooking.

When diarrhea is present it is usually corrected by appropriate diet and small doses of dilute hydrochloric acid. Constipation occurs in the majority of cases. When the colon is neither contracted nor atonic, a glass of strained orange juice on arising in the morning is usually very effective. In the atonic forms special attention must be given to abdominal supports, carefully planned exercise of the abdominal muscles, and the administration of finely ground agar agar. The spastic form of constipation may be corrected by enemata of six ounces of sterilized cottonseed oil given at bedtime and retained through the night, or, even more efficiently by direct local applications of magnesium sulphate to the spastic segments through the sigmoidoscope tube. Catharties must be avoided.

The rules for treatment can be briefly summarized: Liberal diet as just outlined. Forced feeding must be resorted to in order to maintain a high degree of nutrition. The administration of small doses of hydrochloric acid in selected cases. The juices of the citric acid fruits, fermented milk and meat broths should form an important part of the dietary. Proper correction of constipation. Regular physical exercises. The prognosis is good in all cases of achylia, many attain very good health even though the acid never reappears. Chronic enteritis is a complication to be feared, inasmuch as the future health and life of the achylia patient depends on the integrity of the small intestine.

TREATMENT OF CATARRHAL JAUNDICE

George F. Butler (Medical Times, May, 1919) says that in acute catarrhal jaundice the patient should be given at once a grain or two of calomel with a grain of ipecac in divided doses, followed in from four to six hours by a full dose of sodium phosphate. If the patient seems uncomfortably ill he should be put to bed, or remain in the house until the acute symptoms subside. The diet should be nonirritating to the liver and easily digested. Fats, highly seasoned foods, and alcohol should be excluded. After the first day or two the calomel and ipecac may be discontinued, but the saline should be administered daily until the bowels are freely open and show the presence of bile. Enemas of normal salt solution may be given. It is well also to administer some intestinal antiseptic, preferably the sulphocarbolates. Active cholagogues are usually contraindicated. Plenty of water should be drunk. Pruritus

may be relieved sometimes by bathing the skin with a hot or cold solution of sodium bicarbonate, to which may be added, if necessary, a little carbolic acid. Alcohol and menthol diluted and other antipruritics may be tried.

The treatment of chronic catarrhal jaundice is similar to that of the acute form, save that more active intestinal antisepsis is needed. The main objects are to increase peristalsis, deodorize the stools, render the bowels as aseptic as possible, and to favor the emulsification and absorption of fats. Hot or cold compresses wrung out of water acidulated with nitrohydrochloric acid, or a weak solution of ammonium muriate, are of value. When there is much debility and anorexia, tonics, such as the arsenates of iron, quinine and strychnine, with nitrohydrochloric acid are of value. Should such medical treatment fail to give relief surgical measures are indicated.

ORTHOPNEA

Orthopnea is the term applied to the condition of certain patients suffering from dyspnea (and notably from cardiac dyspnea), who cannot breathe as comfortably when lying as when sitting. The reason for the advantage of the upright posture has been a matter for conjecture for some time. Recently Pearce[2] summarized the uncertainty by stating that the greater vital capacity in the upright position, the favoring of the return of the venous blood from the cerebral vessels because of the enlarged thoracic cavity, and the increase in the reserve air in the lungs are all factors to be considered. A more rational explanation of the phenomenon of orthopnea has, however, latterly been offered by Haldane, Meakins and Priestley,[3] who have shown that anoxemia, or deficiency of oxygen in the circulation, and shallow breathing are interrelated in surprising ways.[4] Excess of carbon dioxid causes in the main deepening of respiration; lack of oxygen causes in the main shallow and quick breathing. Now the recumbent posture tends to accentuate any irregularity that may exist in the expansion of the lungs. Shallow breathing causes uneven ventilation of the lungs. The irregularities are less marked when the patient is in the upright position. As the English observers interpret the situation, there are persons in whom the ineffectiveness of the circulation reaches such a degree as just to make the respiratory center begin to respond to anoxemia, with its attendant shallow respiration. The patient may be fairly comfortable so long as he remains as rest in an upright position. As soon as he lies down, the irregularity in the expansion of the lung alters his condition for the worse. "He still has the abnormally great drain of oxygen in the systemic blood, and in addition the oxygenation of the blood in the lungs is no longer so efficiently carried out and consequently the arterial blood carries a less quantity of oxygen than before. There is, therefore, a condition in which an increased call on the oxygen carried by the blood is coincident with a diminished saturation of the hemoglobin in the arterial blood with oxygen. Naturally, therefore, it is

to be expected that there will be an exacerbation of symptoms when the patient lies down." If, as Haldane, Meakins and Priestley argue, orthopnea is due to shallow breathing caused by and intensifying anoxemia, the indication for a method of relief is clear. Oxygen should be added to the inspired air. It is interesting to note that such interferences with abdominal or thoracic movement as may be caused by corsets can hamper the even expansion of the lung sufficiently to induce periodic breathing, which is a sign of oxygen deficiency. In this case, too, the effects are more conspicuous when the person is lying down.—Exchange.

THE ECLAMPSIA QUESTION

Dienst announces that his experimental and clinical research has settled once for all that the blood in eclampsia contains an abnormally large proportion of fibrin-ferment. This excess of fibrin-ferment explains the edema of pregnancy, pregnancy kidney, and eclampsia as the various degrees of intoxication with fibrin-ferment, as he describes in detail. In many hundreds of blood specimens the findings were constantly concordant in the deficient production of antithrombin in the eclampsia and pregnancy cases, and the consequent overloading of the system with thrombin. He announces the constant finding of fibrin-ferment in the amniotic fluid as early as the second month in normal pregnant women, but in these normal women no free preformed fibrin-ferment was ever found in the blood plasma. For this and other reasons he assumes that the maternal placenta is the source of production of the fibrin-ferment. Treatment should aim to relieve the spasm of the blood vessels caused by the excess of fibrin-ferment. Small repeated doses of narcotics, as in Stronganoff's prophylactic treatment, accomplish this, while venesection lowers the blood pressure and starts up the circulation and the production of antithrombin in the liver. Leech extract may also aid in combating eclampsia, and rupture of the membranes may reduce the pressure so that the liver may have better circulation, and aid in combating the toxic action. As the placenta keeps producing more fibrin-ferment, it should be got rid of quickly. Nolf states that acid drinks promote production of antithrombin, and hence the pregnant should be encouraged to drink freely of lemonade, etc. The pregnant naturally crave acid drinks and foods. A fat-poor and albumin-poor diet tends to keep down production of fibrin-ferment. This has been evidenced in the lesser number of cases of eclampsia during the last few years on the restricted war diet. In conclusion, Dienst mentions the recovery from impending eclampsia in a case of the severest form of pregnancy kidney in which he gave lemonade in large amounts and two subcutaneous injections of antithrombin in the form of blood from a healthy pregnant woman near term.—Exchange.

DAVIS, E. P. THE NOURISHMENT OF THE PREGNANT WOMAN

Am. J. Obst., 1919, lxxx, 23.

Undoubtedly the appetite of the absolutely healthy woman is quickened by pregnancy. Vomiting must be considered as pathologic and un-

natural; also abnormal cravings for acids and highly spiced and strongly flavored foods.

To what extent should meat be used as proteid food by the pregnant woman? Unquestionnably excess in this matter produces a large, overgrown, and unduly hard foetal skeleton. A fair average may be obtained if the so-called "red meats" are eaten but once or twice weekly and the proteid obtained in other forms.

Eggs are usually well digested during pregnancy but often are considered as among the very light and unimportant articles of food. In permitting a pregnant woman to eat eggs it must be remembered that they are highly nitrogenous and nutritious.

Proteid contained in fish of all sorts seems often to be better assimilated than that of animal flesh. The fact that proteid matter of great value is contained in vegetables is often overlooked.

It is interesting to observe that the patient who has been digesting proteid material badly during the early stages of pregnancy will do much better as the pregnancy approaches its termination. Often the approach of labor may be predicted from the improvement in nitrogenous metabolism.

It is customary to advise the pregnant woman to eat cereal foods and bread and butter in abundance, but often the fact is forgotten that in addition to these substances a considerable quantity of the proteids of fat may be taken and the combination may prove disastrous.

Especially valuable in pregnancy are the earthy salts and acids contained in vegetables and fruits. When indigestion is annoying and persistent, the juice of the fresh lime and that of the pineapple are of special value.

In determining the diet of pregnant women the very important part played by water must not be forgotten. When metabolism is deficient, however, water should not be drunk in such excess that the kidneys are overcome. A pregnant woman can better dispense with coffee than with tea and is well off without either. Excessive amounts of tea tend to produce constipation and an obstinate form of intestinal catarrh. Alcohol as a food substance is not needed by the healthy pregnant woman. The use of malt extracts during pregnancy is rarely recommended.

Economic conditions are a most important factor in determining the nutrition of the pregnant woman.

ADMINISTRATION OF ARSPHENAMIN

To the Editor:—In his recent communication the director of the Hygienic Laboratory, after detailing what he considers the most important points—adequate dilution and slowness of administration—concludes: "Any physician who fails to observe these precautions should be considered as directly responsible for serious results that follow the improper use of this drug."

This statement, if unchallenged, may prove embarrassing to those physicians whose method of administration differs from that advocated. For the past eighteen months, both in private practice and

in the out-clinic work at Touro Infirmary, I have abandoned the large dilutions and the gravity method of giving arsphenamin for the syringe and concentrated solutions. During this period, I have given, or supervised the giving of, approximately 2,000 injections of arsphenamin by the latter method. Our routine practice is to dissolve 0.6 gm. of the drug in 20 c.c. of freshly distilled water. The average dose given to an adult man of normal weight is 0.5 gm. and to a woman, 0.4 gm. In fresh infections, especially before the onset of a positive Wassermann test, we commonly give 0.6 gm. to the man and 0.5 gm. to the woman, repeating this dose weekly for three doses, and then give at least two more injections at longer intervals, with mercury and iodids in some form between and following the later injections.

Not merely once, but hundreds of times, I have injected 0.6 gm. arsphenamin in 20 c.c. of water in from twenty to thirty seconds without the slightest unpleasant results, either immediate or delayed. The slowness of the injection, on which Dr. McCoy lays so much stress, may be of importance when a large quantity of fluid is being introduced, but when the quantity is as small as 20 c.c., rapidity of injection is not significant. Our patients, except a few high-strung persons, are hardly aware that they have taken medication. Even the so-called "nitroid crises" are unusual when the syringe method is used. Since we have been using this method, we have seen less of other complications. We have had no fatalities, only one case of severe nephritis, now entirely well, but one case of jaundice, and four cases of toxic dermatitis preceded by hyperpyrexia. In our series of 2,000 injections, the results will compare favorably with those of other clinics, no matter what method of administration is followed.

The syringe method and concentrated solutions of arsphenamin, because of greater simplicity of administration and saving of time involved, is the method of choice in a busy clinic. It is at least as safe as the technic advocated by Dr. McCoy.

At present I rarely use neoarsphenamin either in clinic or office practice. While I have had experience with all of the preparations of arsphenamin available, I routinely use that put out by the Dermatological Laboratory of the Philadelphia Polyclinic. The fact that we dissolve this preparation in boiling water without hesitation, and that our results have been uniformly good with it, has made us disinclined to change.

Success in the administration of arsphenamin depends chiefly on the following points: first, the selection of a reliable preparation; second, the use of freshly distilled, boiled water, both for dissolving the arsphenamin and for the sodium hydroxid solution; third, care in selecting the patient and adjusting dosage and frequency of repetition.

A. NELKEN, M. D., New Orleans.
Jour. A. M. A.

INFLUENZA PREDICTION FULFILLED

In the November 8 issue of the London Lancet appeared a prediction by Dr. John Brownlee, D. Sc., based on a careful study of past influenza epidem-

ics, that a recurrence of the 1918 influenza epidemic would occur in January or February, 1920.

Doctor Brownlee found that influenza epidemics recurred at intervals of 33 weeks, providing the thirty-third week did not fall between June and December, in which case the recurrence would be expected at the end of 66 weeks or 99 weeks, and therefore he regards the Fall epidemic of 1918 as an exception to the rule. In the United States we are now having a recurrence after 66 weeks.

It is now exactly 66 weeks since the mortality peak of the 1918 epidemic in Chicago. The same is true for New York City and Washington. In all three of these places influenza is now epidemic.

The periodicity suggests that we may be dealing with infecting organisms which not only have the power to reproduce themselves in a virulent form continuously for a long period if susceptible persons are exposed, but which also have the power of developing in cycles of 33 or 66 weeks.

The recurrence might be explained on the hypothesis that immunity has lasted 66 weeks, though this hypothesis does not explain the fact already noticed in some families that those attacked in 1918 are now immune, while those not attacked in 1918 are now contracting the disease. The more reasonable explanation seems to be that the present epidemic is due to a definite cyclical regrowth of the infecting organisms from the seed of the former epidemic.

Definite cycles of development are common in the known vegetable and animal world; some plants flower annually, some biennially; the malarial organism may complete its cycle in two or more days; the locust requires in some cases 17 years.

Similarly the organism responsible for our recent pandemic may complete its cycle in 33 weeks or perhaps 66 weeks. This recurrence of the eipdemic after 66 weeks certainly strengthens the view that the epidemics of 1889, 1890, 1918 and 1920 all have a common etiology.

Surgery

CHRONIC PATHOLOGICAL CHANGES IN THE PROSTATE IN LONG STANDING STRICTURE

When the prostate gland follows a normal evolution it does not undergo hypertrophy in elderly subjects. On the contrary, it is more prone to sclerosis and atrophy, as is the rule for all viscera in subjects past middle age. The socalled senile hypertrophy of the prostate is a tumor and does not represent the normal evolution of the gland.

Stricture of the urethra is an extremely frequent cause of chronic prostatitis. The lesions of this morbid process, favored by stricture of the urethra, follow an evolution with symptoms which rarely give rise to any great annoyance to the patient. Attention is not directed to the process therefore which later on results in profound lesions of the prostate.

A chronic prostatitis may tend toward spontaneous cure with the formation of sclerotic tissue. According to circumstances this sclerosis—partial or generalized—will bring about either a hypertrophic prostatic cirrhosis, an infrequent result, or an atrophy of the gland whose ultimate phase is the progressive disappearance of the former gland.

If instead of tending toward a cure, the chronic infection extends more and more, at the same time increasing in

virulence, abscesses of a latent type are produced, which destroy a more or less considerable portion of the gland, or the chronic suppuration, of which it is the seat, will end in causing it to disappear completely. In the prostatic pockets thus created secondary phosphatic calculi form, the result of stagnation of urine.

These prostatic lesions are the cause of various disturbances either of micturition—pollakuria, acute or chronic retention, incontinence—or of the genital function which at the age of these patients is very greatly diminished or occasionally completely abolished. Finally, as in all prostatic processes, both the general health and nervous functions suffer.

The treatment should first of all be directed to the disturbances of micturition resulting from the stricture. When the calibre of the urethra has been restored the chronic prostatitis must be dealt with by the usual classic measures. If abscesses are present in the gland they should be opened and drained through a perineal incision. Should sinuses develop from a spontaneous opening of these pus collections, the prostate itself must be cleaned out or even an atypical prostatectomy may be indicated. — Ed. N. Y. Med. Jour., 11-15-19.

SOME HERNIAS THAT DISQUALIFY FOR MILITARY SERVICE, WHETHER OPERATED UPON OR NOT.

J. C. Bloodgood (*J. Am. M. Ass.*, 1918, lxx, 515). There is a small group of hernias for which at the present time operations have failed to result in cure in from 20 to 50 per cent of cases. Among 243 cases of inguinal hernia, this type occurred in 11 instances, about 4.5 per cent. Among these 11 cases there were 6 recurrences, more than 50 per cent, in from six weeks to six months after operation.

This type of hernia can be recognized when the patient is examined lying flat on his back. If the finger is pressed against the scrotum and pushed up into the external ring, as the index finger passes through the external ring, the hernia having been reduced, in the larger number of cases it meets an obstruction (the conjoined tendon) and is deflected upward and outward, following the course of the inguinal canal. In this smaller group the index finger meets no obstruction, but enters at once into the peritoneal cavity, and in some cases the opening is so large that when the index finger is flexed it can palpate the public bone in the region of the symphysis.

In those cases in which this examination detects the complete absence of the conjoined tendon, the ordinary operation for inguinal hernia, according to Bloodgood's investigations up to 1899, failed to cure in about 50 per cent of the cases. Later observations of these cases have shown that the percentage of recurrences has been reduced to about 15 or 20. It is the author's opinion that it is possible to select this group at the complete examination at the cantonment, and these applicants or registrants should be rejected, saving the government the expense incidental to the operation and later discharge for recurrent hernia.

HYSTERECTOMY IN OVARIAN FUNCTION.

Richardson (*Surg. Gynec. and Obstet.*, February, 1919), sums up the evidence for and against the retention of healthy ovaries during hysterectomy. He says that much of the confusion regarding this comes from failure to appreciate the scope and complexity of the problem in-

volved. He claims that it is necessary to have a thorough knowledge of the normal physiology of the ovaries and to inquire from all sources in what respect and to what degree total oblation on the one hand or conservation of ovarian tissue on the other, alters the physiological composite. His conclusions are as follows:

AA. The ovary is a glandular organ of complex function, our knowledge of which is at present far from complete.

BB. The uterus is not essential to a continuation of ovarian function, except as regards menstruation and reproduction.

CC. The advocates of total oblation have not furnished convincing evidence of the correctness of their contention.

DD. The disturbances of ovarian function attributed to hysterectomy are partly those associated with normal menstruation and partly those arising from damage to the ovary through operative trauma or disease.

EE. The weight of evidence furnished by anatomical, experimental and clinical investigations is overwhelmingly in favor of retention of sound ovaries, both before and after the menopause age.

INNOVATIONS IN THE BASSINI OPERATION FOR INGUINAL HERNIA

(Innovazioni all'operazione dell' ernia inguinale secondo Bassini). *Policlin.*, Roma, 1919, xxvi, sez. prat. 686. The author refers to some minor alterations in the Bassini operation which were reported by German surgeons during the war. These innovations are aimed principally against the tendency to recurrence. Metallic sutures have been used, the internal oblique has been left intact, a new internal inguinal ring substituted, and transplants of fascia made at the entrance of the inguinal canal to strengthen the supposed weak spots.

In reviewing these procedures the author states that all who have made these changes have been unanimous in admitting that atrophy or weakness of the internal obliquus reduces the chances of obtaining a favorable result by the Bassini operation. There is no unanimity, however, in regard to the point where resistance fails, as the fault has been credited to both the internal and the external rings.

While admitting that theoretically the various innovations suggested are good, the author believes the unmodified Bassini technique is best for it has been found to give from 90 to 98 per cent of recoveries. The innovations suggested are unnecessary. After thirty years the Bassini operation remains today in his opinion the only radical method for the cure of inguinal hernia.

THE TREATMENT OF CHRONIC SEMINAL VESICULITIS

A. P. Martin (Tratamiento de las vesiculitis seminales cronicas). *Siglo med.*, 1919, lxvi, 356. Martin points out that lesions of the seminal vesicles are frequently responsible for the persistence of gonorrhoeal processes. As the symptoms of the vesiculitis are often masked, the prostate is blamed and often wrongfully operated upon. In painfully chronci cases with recurring epididymitis .the seminal vesicles will usually be found to be diseased.

The author reports 7 cases, most of which were cases of gonorrhoeal inflammation of the seminal vesicles, which he treated according to the method devised by Thomas of Philadelphia. This treatment is based on the following facts:

1. When a fluid is injected into the deferent canal in the direction of the outlet of the seminal vesicles into the posterior urethra, the injected fluid will seek the vesicle, provided the latter is empty, rather than the exterior, since this outlet of the vesicle is of greater calibre than the opening of the ejaculatory duct in the urethra.

2. When the quantity of fluid injected is not large enough to excite contracture of the vesical musculature to expel it, the injected fluid will remain and exert its germicidal action in the vesicle for a long time, especially if the latter has been previously emptied by massage.

The therapeutic effect of this method is therefore greater than that of a simple vesiculotomy and operative traumatism is avoided. Whatever theoretical objection may be offered to the method the practical results obtained from it are excellent. The only operation necessary is a small incision to reach the vas deferens from whence the injection is made. Collargol or some other silver salt is then injected and the skin incision sutured.

Neither epididymitis nor funiculitis was observed in any of the 7 cases treated and the results were quite satisfactory. —Ex.

FRACTURES OF THE UPPER END OF THE HUMERUS

James H. Stevens (*Annals of Surgery*, February, 1919) has come to the following conclusions:

1. Fractures of the upper end of the humerus, i. e., above the insertion of the pectoralis major, will in nearly all cases conform to three types and their subdivisions. All should be treated in abduction and external rotation with tractions varying from a few days in mild cases to twelve days in complicated cases.

2. Passine motion must be begun early and active motion must follow quickly if the tendency to restriction of motion is to be presented. It must always be used with care and with due regard to the anatomy and pathology. In the mild cases it is safe to begin early since there is little tendency toward displacement.

3. A right angled splint in the severe cases and a firm pillow splint in the mild cases always with traction is the ideal method of treatment.

4. External rotation in abduction as a treatment is almost an impossibility of accomplishment unless the patient remains in bed. Then it is the simplest method and does not require an uncomfortable position on the part of the patient.—Ex.

HERNIA DEVELOPING IN THE SCAR AFTER APPENDICECTOMY

(Zur Ensthehung von Narbenhernien nach Appendektomie). *Cor.-Bl. f. schweiz. Aerzte,* 1919, xlix, 353. In a series of 127 appendicectomies in which drainage was used a scar hernia developed in 14 cases within a few weeks or months after the laparotomy. Two of these followed a McBurney incision; 2, a pararectal incision; 88, an incision under Poupart's ligament; 1, an incision 10 centimeters long; and 1, an incision from the rectus to a point two finger-breadths above the anterior superior spine of the ilium. The time of drainage was prolonged in only three of these cases and varied from five to thirty-five days.

When the suturing is done carefully in an appendicectomy performed in the afebrile period a hernia does not develop in the scar. Such a rupture is more apt to follow an encysted abscess or appendicular peritonitis which requires prolonged drainage. The sex, age, or con-

stitutional condition of the patient do not seem to be of particular importance. The factors upon which the production of scar hernia depends are the nature of the incision and the quality of the suture. When the McBurney technique is used and the incision closed in layers close up to the drainage tube with absorbable suture material the incidence of hernia seems to be less. Parallel incisions close to Poupart's ligament should be avoided. The McBurney incision preserves the integrity of the muscle as well as of the nerves and vessels in the abdominal wall to the maximum.

When the abdominal wall is sutured with non-absorbable suture material, and especially when drainage is prolonged, there is always danger of infection, even when care is taken to make the wound tight above the drain.

END RESULTS OF TRANSFUSION

W. Grant Waugh (*British Medical Journal*, July 12, 1919) reports on the end results in a series of 124 patients transfused with unaltered whole blood by means of Vincent's paraffin coated tube. The chief indications in the base hospital were severe secondary hemorrhage, as a preliminary to high amputation of thigh or arm, and in certain cases of pyemia. Usually about 600 mils of blood were given, but amounts up to 1,200 mils were occasionally used. Incompatibility was encountered in three cases, in two of which it was probably due to faulty comparison of the bloods before transfusion. No harm resulted in either of these. In a third patient, one suffering from pyemia, acute collapse with symptoms of hemolysis developed and resulted in death after about 200 mils of blood had been given from the same donor as had supplied the blood for a previous transfusion without harm. It is believed by the author that the incompatibility developed in the recipient as the result of the previous transfusion, though specific tests to determine this could not be made. The general end results obtained are given in the form of the percentage of deaths, and it should be borne in mind that transfusion was often performed in many desperate cases. In patients with secondary hemorrhage and ligation of the main artery there were thirty-three per cent of deaths among those transfused as compared with forty-six per cent among those not transfused. In secondary hemorrhage with amputation of the limb the deaths were, respectively, 28.5 per cent and fifty per cent for the two classes. In cases of sepsis or gangrene with amputation of the limb the deaths among the patients transfused were ten per cent, contrasting with thirty-one per cent among the patients not transfused. Finally transfusion was tried in nineteen cases of pyemia and the deaths were only about thirty-seven per cent. In this later group the blood used was obtained from men who had recovered from slight septic lesions.—Ex.

Book Reviews

Principles and Practice of Obstetrics. By Joseph B. Delee, A. M., M. D., Professor of Obstetrics at the Northwestern University Medical School. Third edition, thoroughly revised. Large octavo of 1089 pages, with 949 illustrations, 187 of them in colors. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, $8.50 net. W. B. Saunders Company, Philadelphia and London.

There is probably no other textbook more generally accepted by the profes-

sion as authority than this third edition of De Lee. Thoroughly comprehensive in text, concise without sacrifice of diction and beautifully illustrated. We are pleased to note sensible conservative recommendations as to the use and applicability of the various methods of Caesarean section. The diagnosis and treatment of the various conditions and procedures are fully described in such a lucid manner as to enable the student and beginners to readily grasp the essential points.

Cerebrospinal Fluid in Health and Disease. By Abraham Levinson, B. S., M. D., Associate in Pediatrics, Northwestern University Medical School, Associate Pediatrician, Sara Morris Children's Hospital of the Michael Reese Hospital, Chicago; Attending Pediatrician, Mount Sinai Hospital, Chicago; Attending Physician, Children's Department, Chicago-Winfield Tuberculosis Sanitarium, with a foreword by Ludwig Hektosn, M. D.

Fifty illustrations including fine color plates. St. Louis. C. V. Mosby Company, 1919. Price $3.00.

The subjects considered in this valuable brochure are after first giving a concise history of Cerebrospinal Fluid; the Anatomy and Physiology of Cerebrospinal Fluid. Methods of obtaining Cerebrospinal Fluid from the living body. Properties of Normal Cerebrospinal Fluid. Pathological Cerebrospinal Fluid, Method of Examination of Cerebrospinal Fluid for Diagnostic Purposes. Cerebrospinal Fluid in Various Diseases. Interspinal Treatment to which are added a summary and an appendix. This is one of the very valuable contributions to an important branch of medical practice and embodies in a concise practical way all that is accepted as correct methods of diagnosis and treatment at this time.

Advertisers' News Notes

(Published from time to time with the sanction of the Co-operative Medical Advertising Bureau of the A. M. A.)

ESTABLISHES CANADIAN BRANCH

The rapid growth of business in Canada has made it necessary for The Abbott Laboratories to establish its own branch office at 57 Colborne Street, Toronto.

The A. M. A. Council-Passed Dakin antiseptics, Chlorazene, and Dichloramine-T are proving immensely popular among Canadian physicians and surgeons, as well as among American doctors.

During the last few weeks, one of the departments of Armour and Company, Chicago, noticed that large quantities of their Salad Oil, under the Veribest Brand, were being purchased by druggists throughout the country to such an extent that this department investigated and found that the oil was being used for dispensing as sweet oil; also in the making of creams, lotion and similar preparations.

Salad Oil is one of the purest products made, being manufactured entirely from cottonseed and highly refined. It has a mild, sweet flavor and of light amber color. Perhaps the increased cost of olive oil may have had something to do with the adoption of cotton seed oil.

This Salad Oil is now refined by a process vastly superior to the methods adopted some years ago. We understand that

this oil is smokeless at a temperature of 510 degrees and that during one of the final tests, one of these vials was buried in cracked ice and salt for five hours and when removed, it was absolutely clear.

The medical and dental professions of the United States will be interested to know that the Frank S. Betz Company, of Hammond, Ind., who recently opened a complete exposition and sales room at 6 and 8 West 48th St., New York City, have purchased the entire stock and business of the Crown Surgical Instrument Co., located on 8th Avenue near 49th Street, and will retain the services of the entire Crown Surgical Co.'s organization, including Mr. A. G. Roberts, who will manage the new Betz Store at 6 and 8 West 48th St.

THE VICTOR LU-MI-NUM DARK ROOM AND VIEWING LIGHT

At last—a real dark room and viewing light—The Victor Lu-mi-num is the solution to every shortcoming heretofore contended with in dark room lamps.

READ WHY

1. Perfect universal adjustment—the only lamp that gives the quality and quantity of light wanted, where wanted.

2. Every adjustment can be made with one hand.

3. Two lamps in one — dark room lamp or negative examination light. Change from one to the other instantly.

4. The only lamp made that has absolute light control.

5. Made of aluminum, cannot rust, cannot corrode, cannot warp, cannot be damaged by chemical solution. No paint or enamel to peel off.

6. Absolutely light tight. The first real safe light on the market.

The Victor "Lu-Mi-Num" Dark Room and Viewing Light is beyond comparison with any other dark room lamp. It is the best to be had at any price and will prove to be worth, in practical use, several times what it sells for—$14.00. Complete, with connecting cord and plug. Specify 110 or 220 volt.

VICTOR ELECTRIC CORPORATION
Chicago

New and Nonofficial Remedies

During March the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Abbott Laboratories:
- Elixir Barbital Sodium.

Antoine Chiris Company:
- Barbital-Chiris.
- Birbital Sodium-Chiris.

Gilliland Laboratories:
- Schick Test (Gilliland).

Hollister-Wilson Laboratories:
- Ampoules Corpora Lutea Soluble Extract—Hollister-Wilson.
- Ovarian Residue—Hollister-Wilson.

Vitalait Laboratory of California:
- Condensed Vitalait.

Yours truly,

W. A. Puckner, Secretary,
Council On Pharmacy and Chemistry.

Ovarian Residue—Hollister-Wilson—The residue from the fresh ovary of the hog, after the ablation of the corpus luteum. It is used for the same conditions as the entire ovarian substance (see New and Nonofficial Remedies, 1920, p. 201) but is claimed to be somewhat more stable. Hollister-Wilson Laboratories, Chicago (Jour. A. M. A., March 6, 1920, p. 675).

Past the Experimental Stage

Blood chemical methods are of great practical usefulness in diagnosis, prognosis and treatment, to wit, in Nephritis, Diabetes, Estimation of Operative Risk. We estimate the quantity of Non Protein Nitrogen, Urea Nitrogen, Uric Acid, Creatinine, Sugar.

WRITE FOR FREE LITERATURE AND CONTAINERS.
TWO TESTS FOR SYPHILIS FOR ONE PRICE—

THE HECHT GRADWOHL
WASSERMANN - - - $5.00

This gives information not obtainable with the Wassermann alone.
VACCINES, TISSUES, PASTEUR ANTIRABIC VIRUS,
URINE, ETC.

CINCINNATI BIOLOGICAL LABORATORIES,

ALBERT FALLER, M. D., Director,

19 W. SEVENTH STREET, CINCINNATI, OHIO.

GENERAL INDEX VOL. XIV.

A

Page

Abscess: Multiple—Sequel of Influenza—Robert M. Lewis 30
Achondroplasia—Joseph L. Miller 366
Advertisers' News Notes 479
Arkin, Aaron—Clinical and Pathological Studies of Pandemic Influenza 127
Artery: Persistent Hyaloid—T. E. Perry 450
Angioneurotic Edema—Walter E. Vest 259
Announcements and Communications 61-149-181-217-263-304-350-380-422-457

B

Beers, Oscar B.—Electricity in Gynecology 90
Blue, Rupert—"To the Editor" 135
Book Reviews 40-79-200-240-358-382-394-425-437-478
Breast: Surgery of—James Schurim 361
Butt: A. P.—Joseph Price 281

C

Cannedy, John E.—Long Resection of Intestine 170
Cancer of Breast: Failure of Restricted Operation of—Alexius McGlannan 247
Clinical Week 214
Commandments Governing the Relation of Public with the Doctor 145
Covert, O. F.—Oration in Surgery 321
Cystoscope: Practical Application of—H. A. Giltner 328

D

Diabetes Mellitus with Multiple Abscess—O. L. Perry 261
Dillon, Mrs. F.—Public Health Nursing 175
Disease: Laboratory Methods As An Aid in Detection—Chas. E. Gabel 332

E

Editorials 65-98-147-187-222-265-310-426-351-461
Emmett, J. M.—Head Injuries 254
Encephalitis Lethargia—Report of a Case—W. H. St. Clair 409
Examination Questions—July Meeting 100

F

Fables for the Kansas Doctor 96
Farnsworth, F. F.—Veneral Disease Problem 56
Fleming, Chester S.—Ovarian Fibroid 92
Flu Anyway,—Damn The—C. H. Maxwell 131
Flu Return,—Will The 136
Fractures,—Treatment of Ununited—A. J. Noome 337
Fredlock, A. M.—The Malingerer 449

G

Gabel, Chas. E.—Laboratory Method As An Aid in the Detection of Disease 332
Giltner, H. A.—Some Practical Applications of the Cystoscope 328
Golden, W. W.—A. M. A. Report of Surgery and Gynecological Sections 48
Golden, W. W.—Fractures 241
Golden, W. W.—Review of Hospital Legislation 401
Guthrie, A. J. — President's Address to Hospital Association, Clarksburg, W. Va., 1919 54
Gynecology: Electricity in—Oscar B. Beers 90

H

Hall, Harry M.—Practical Side of a Heart Murmur 441
Hamilton, E. S.—Acute Nephritis 208
Harris, Thos. L.—Surgical Treatment of Suppuraline Pleuritis 202
Haskins, Frederick—Case of Vivi-Section 219
Hatfield, S. D.—Influenza Phrophylaxis 125
Health Forces—Organization of Public 140
Health News 273
Heart Murmur: Practical Side of a—Harry M. Hall 441

Head Injuries:—J. M. Emmett and R. J. Wilkinson 254
Hendon, G. A.—Acute Intestinal Obstruction 411
Hicks, Chas. F.—Extra-Uterine Pregnancy 376
Hines, O. T.—Pellagra 369
Hospital Legislation—Review of—W. W. Golden 401
Hospital Management—Chester R. Ogden 81
Hunter, J. Ross—Relation of Physicians to Hospital 293
Hunter, J. Ross—Recurrence of Inguinal Hernia After Operation 447
Hysterectomy,—Indications of Vaginal—C. M. Scott 201

I

Influenza: Clinical and Pathological Studies of Pandemic—Aaron Arkin 127
Influenza Prophylaxis—S. D. Hatfield 125
Inguinal Hernia After Operation: Recurrence of—J. Ross Hunter 447
Injuries of the Extremities: Lessons from the War with Case of Industrial—David Silner 86
Intestine,—Long Resection of—John E. Cannedy 170
Intestinal Obstruction,—Acute—G. A. Hendon 411
Irons, J. C.—Physicians' Responsibilities 167

J

Jones, Harriet B.—Tuberculosis Situation in West Virginia 416

L

Lanich, L. J.—Treatment for Some of the Emergencies of Obstetrics 452
Lewis, Robert M.—Multiple Abscess—Sequel of Influenza 30

Mc

McGlannan, Alexius—Failure of Restricted Operation in Cancer of the Breast 247
McGeorge, D. A.—Differential Diagnosis of Pleurisy with Effusion 161
McGuire, Hunter H.—Ocular Lesions Due to Focal Infection 295

M

Malingerer, The—A. M. Fredlock 449
Maxwell, C. H.—Damn The Flu Anyway 131
Medicine 33-73-105-156-194-229-274-318-390-430-468
Miller, Joseph L.—Achondroplasia 366

N

Nephritis,—Acute—E. S. Hamilton 208
Nervous Disorders: Functional—Tom A. Williams 300-346
New and Non-Official Remedies 117-199-271-480
News Items 267
Noome, A. J.—Treatment of Ununited Fractures 237

O

Oates, T. K.—Prostatectomy 368
Obstetrics:—Treatment for Some of the Emergencies in—L. J. Lanich 452
Ocular Lesions Due to Focal Infection—Hunter H. McGuire 295
Ogden, Chester R.—Hospital Management 81
Ovarian Fibroid—Chester S. Fleming 92

P

Perry, O. L.—Diabetes Mellitus with Multiple Abscess 261
Perry T. E.—Persistent Hyaloid Artery 450
Persistent Hyaloid Artery—T. E. Perry 450
Pellegra—O. T. Hines 369
Pelvic Disorders: Significance of—Edward H. Richardson 404
Physicians' Responsibilities—J. C. Irons 167
Pleurisy with Effusion: Differential Diagnosis—D. A. McGeorge 161
Pleuritis:—Surgical Treatment Suppurative—Thos. L. Harris 202
Post, T. A.—Rat Bite Fever 205
Practical Side of a Heart Murmur—Harry M. Hall 441
Pregnancy: Extra-Uterine—Chas. F. Hicks 396
Presidential Address—Robert J. Reed ..... 1 - 41

President's Address—Hospital Association, Clarksburg, W. Va., 1919—J. A. Guthrie 54
Price, Joseph—A. P. Butt 281
Program of West Virginia State Medical Association 438
Propaganda for Reform 37-78-118
Prostate,—Inflammation of—H. G. Tonkins 172
Prostatectomy—T. K. Oates 368
Public Health Nursing—Mrs. Jean F. Dillon 175

R

Rat Bite Fever—T. A. Post 205
Recurrence of Inguinal Hernia After Operation—J. Ross Hunter 447
Reed, Robert J.—Presidential Address 1
Relation of Physicians to Hospitals—J. Ross Hunter 293
Report of Meeting of Council 22
Richardson, Edward H.—Significance of Pelvic Disorders 404

S

Sanitation Anyway:—To Hell With—H. G. Steele 288
Scott, C. H.—Indications for Vaginal Hysterectomy 201
Schurim, James—Surgery of the Breast 361
Shick Reaction—W. E. Smith 250
Silner, David—Lessons from the War in the Case of Industrial Injuries of Extremities 86
Smith, W. E.—Shick Reaction 250
Society Proceedings 69-154-190-228-270-312-355-389-428-467
State News 31-70-103-192-224-316-353-388-427-464
Steele, H. G.—To Hell With Sanitation Anyway 288
Steinberg, M. E.—Study of Wasserman Reaction and the Hecht, Weinberg, Gradwhol Modification 94
Steinberg, M. E.—Retrophamgeal Tumor 214
St. Clair, W. H.—Report of Case of Encephalitis Lethargica 409
Surgery and Gynecological Section of A. M. A.—W. W. Golden 48
Surgery,—Oration in—O. F. Covert 321
Surgery 36-76-112-158-197-236-278-320-360-395-434-474

T

Tonkins, H. G.—Inflammation of the Prostate 172
Transactions of House of Delegates 15
Treatment for Some of the Emergencies in Obstetrics—L. J. Lanich 452
Tuberculosis,—Pulmonary—Chas. R. Wollwine 372
Tuberculosis Situation in West Virginia—Harriett B. Jones 416
Tumor,—Retropharyngeal—M. E. Steinberg 214

V

Venereal Disease Problem—F. F. Farnsworth 56
Vest, Walter E.—Angioneurotic Edema 259
Vivi-Section,—Case of—Frederick Haskins 219

W

Wasserman Reaction of The Hect, Weinberg, Gradwhol Modification,—M. E. Steinberg 94
Wilkinson, R. J.—Head Injuries 254
Williams, Tom A.—Principle Preliminary to Treatment of Functional Nervous Disorders 300-346
Woolwine, Chas. R.—Pulmonary Tuberculosis 372

RELIABILITY
UNIFORMITY PURITY EFFICIENCY
E. R. SQUIBB & SONS

IMPORTANT

SQUIBB BIOLOGICALS

AT THIS TIME OF THE YEAR

For the Treatment of Pneumonia

especially of Type I, (Lobar Pneumonia)

Anti-Pneumococcic Serum is of great value. It should be used early in large quantities and full doses repeated every six hours until the crisis is passed; also **Anti-Streptococcic Serum** is important for pneumonia in addition to anti-pneumococcic serum. It is best not to use the two mixed, but to administer each separately as the symptoms and bacteriological findings demand.

Anti-Streptococcic Serum Squibb is useful also in post-partum or puerperal sepsis, in erysipelas, and for septic conditions due to wounds infected with streptococci.

For Increasing Phagocytosis in Sepsis

Leucocyte Extract is of paramount importance, either in conjunction with vaccine and serum, or alone if the exact pathogenic microorganism can not be determined.

For the Prevention and Cure of Diphtheria

Diphtheria Antitoxin (Globulin) yields desired results. It is small in bulk for the number of units contained.

For the Prevention of Small-Pox

Small-Pox Vaccine is the trustworthy prophylactic.

Reprints giving detailed information will be furnished on request

E. R. SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.
80 BEEKMAN STREET

RELIABILITY
UNIFORMITY PURITY EFFICIENCY
E. R. SQUIBB & SONS

A House of Service

4—Testing of Therapeutic Agents

THIS house received a ton of ergot a few months ago. Samples of it were subjected to a series of physiological tests. The drug was only one-half as active as that demanded by our standard. The shipment was promptly rejected.

During the past three years difficulty was experienced in getting digitalin of a quality that would meet our requirements. Numerous samples were tested. They ranged in activity all the way from 25% to 75% of our specifications. The result is that no digitalin is supplied under the P. D. & Co. label at the present time.

Consignments of digitalis leaves received during the past few years showed a pronounced variation in activity when tested physiologically. One lot was three times as potent as the standard. Two others were respectively one-fourth and one-half as potent.

Recently a quantity of belladonna leaves was examined that assayed two-thirds of the desired strength. Another lot was twice as potent as the recognized standard. Several lots of aconite showed as much variation in activity as 400%, and hyoscyamus, on different occasions, varied as much as 500%.

Standard preparations of variable drugs, such as those mentioned, are made by increasing or decreasing the amount of raw material used in the manufacturing process.

Some time ago it was impossible to get strophanthus of good quality. The commercially available drug, when tested physiologically, proved to be only one-fourth as potent as the standard requirement. As a result, it was necessary to use four times the usual quantity of drug to make a product that would conform to the specifications of this house.

Methods of testing therapeutic agents are being devised and improved constantly in our scientific laboratory. Frequently there are no charted paths to follow—no established methods of determining the potency of drug products. In such cases we proceed to devise standards. A biological product for the control of hemorrhage was developed recently. How could the activity of the preparation be determined? And how could the product be adjusted to a uniform standard of activity? A physiological test was devised—a test which specifies that this hemostatic must shorten the coagulation time of the blood to at least one-third the normal for the test animal used.

Thousands of raw products are used by this house in manufacturing its three thousand pharmaceutical and biological preparations. Every substance is tested before it is accepted; and every finished preparation is likewise tested by the best available scientific method to insure a definite and uniform standard of activity.

PARKE, DAVIS & COMPANY

LIBRARY OF THE
COLLEGE OF PHYSICIANS
OF PHILADELPHIA

This Book is due on the last date stamped below. **No further preliminary notice will be sent.** Requests for renewals must be made on or before the date of expiration.

DUE	RETURNED

A fine of twenty-five cents will be charged for each week or fraction of a week the book is retained without the Library's authorization.